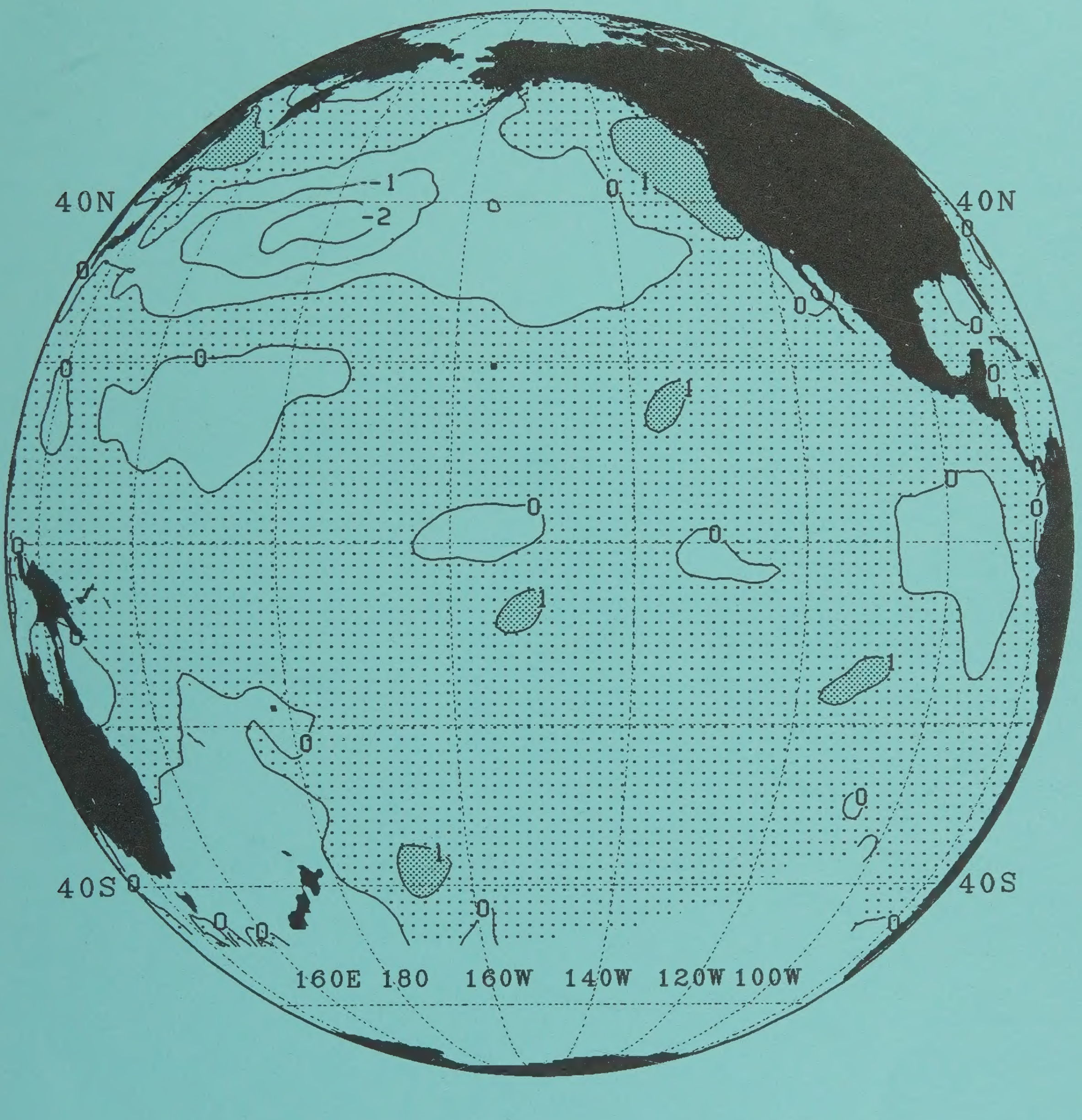
気象庁海洋月報

Monthly Ocean Report

July 1995 (No. 31)



El Niño Monitoring Center
Japan Meteorological Agency

気象庁海洋気象部海洋課
エルニーニョ監視センター

平成7年7月

気象庁海洋月報は、気象庁海洋気象部海洋課エルニーニョ監視センターで作成されています。
本月報に関する問い合わせは、

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Monthly Ocean Report is prepared by the El Niño Monitoring Center, Oceanographical Division, Marine Department, Japan Meteorological Agency.

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表紙は、1995年 7 月の太平洋の月平均海面水温偏差図です。
陰影部は、平年より高温の海域を示しています。

The figure on the front cover shows the monthly mean SST anomalies for July 1995 in the Pacific Ocean.
Areas of positive anomalies are shaded.

目　次

Table of Contents

海況の特徴（１９９５年７月）

太平洋の海況

太平洋赤道域の海面水温は、100°W付近で平年より0.5℃低く、170°E以西で0.5℃以上高かったほかは、ほぼ全域で平年並であった。エルニーニョ監視海域（4°S～4°N、150°W～90°W）の海面水温偏差は、+0.1℃と平年並であった（第１表、第１図、第６図）。

北太平洋の海面水温は、30～45°Nの160°Eから165°Wにかけて平年より１℃以上低く、特に日付変更線付近では２℃以上低かった。北米西岸では、35～55°Nで平年より1℃以上高かった。また、フィリピン付近では平年より0.5℃高かった（第6図）。

日本近海の海況

日本近海の海面水温は、日本海北部、オホーツク海で平年より１℃以上高かった。一方、関東付近及び北海道南東沖では１℃以上低かった（第24図）。

本年４月中旬から続いていた東海沖の黒潮の蛇行は、７月中旬には伊豆諸島の東に達し、東海沖では蛇行が見られなくなった。一方、４月中旬に九州の東で新たに発生した小蛇行は、６月下旬に紀伊水道沖に達したが、７月に入りその規模は小さくなった（図A、第27図）。

本州東方の親潮系の冷水（深さ100mで５℃以下）は、沿岸寄りの分枝は40.0°N, 142.7°Eまで、沖合の分枝は38.9°N, 147.0°Eまで、それぞれ達していた（第26図）。

熱帯の気象

対流圏上層の大規模な発散の中心は、平年より西に30度偏ってインドシナ半島付近に存在し、ベンガル湾からフィリピンにかけて、モンスーンに伴う対流活動が平年より活発だった。対流圏下層の東西風は、太平洋西部から中部にかけて東風偏差が卓越し、インド洋ではアラビア海を中心に西風偏差となった。南方振動指数（ＳＯＩ）は、4か月ぶりに正の値（+0.4）となった（第１表、第3～5図、第12図）。

［気象庁長期予報課提供］

HIGHLIGHTS July 1995

Pacific

Sea surface temperatures (SSTs) were near normal in the equatorial Pacific except for negative anomalies greater than 0.5°C around 100 °W and positive anomalies greater than 0.5°C west of 170°E. The SST index for region B (Fig. 1) was near normal, +0.1°C (Table 1 and Figs. 1 and 6) .

In the North Pacific, SSTs were more than 1°C below normal between 30°N and 45°N from 160°E to 165°W, especially in seas around the date line where SSTs were more than 2°C below normal. Positive SST anomalies greater than 1°C were observed between 35°N and 55°N along the west coast of North America. Around the Philippines, SSTs were more than 0.5°C above normal (Fig. 6).

Seas adjacent to Japan

SSTs in the northern part of the Japan Sea and the Sea of Okhotsk were more than 1°C above normal. Negative SST anomalies greater than 1°C prevailed in seas around Kanto and southeast of Hokkaido (Fig. 24).

The Kuroshio meander off Tokai that continued from the middle of April moved to a position east of Izu Islands in the middle of July. Another small meander which appeared east of Kyushu in the middle of April shifted to a position off the Kii Channel at the end of June and became smaller in July (Fig. A and Fig. 27).

Coastal and off-coastal branches of the Oyashio cold water (below 5°C at a 100 m depth) extended southward to 40.0°N, 142.7°E and 38.9°N, 147.0°E, respectively (Fig. 26).

Atmospheric conditions in the tropics

The center of the large-scale divergence at the upper troposphere was located over the Indochina Peninsula, 30 degrees west of its normal position. Convective activities accompanied by Asian summer monsoon were enhanced from the Bay of Bengal to the Philippines. Low-level easterly along the equator was stronger than normal through the western and central Pacific. In the Indian Ocean westerly anomalies were observed especially from the Arabian Sea to 80°E. The SOI returned to positive, +0.4 (Table 1, Figs. 3-5 and 12).

[Prepared by the Long-range Forecast Division, JMA]

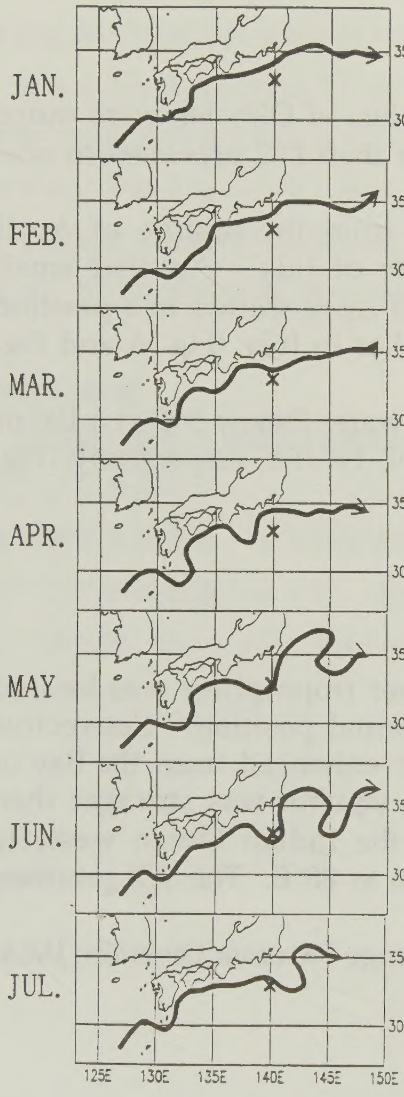
黒潮の蛇行の東進に伴う水温の変化

1995年１月下旬に九州の東で発生した黒潮の小蛇行は、徐々に東進し、３月下旬には紀伊水道沖に、４月下旬には東海沖に達し、発達した。その後、この蛇行は停滞することなく東進を続け、７月下旬には伊豆諸島の東まで達し、東海沖には蛇行は見られなくなった（図A）。この蛇行の移動に伴い、伊豆諸島では顕著な海面水温の変化が観測された。八丈島における海面水温は、蛇行の内側の冷水域に入っていた５月中旬から６月にかけては、19℃前後で平年よりも３～４℃も低かったが、水温は蛇行の通過とともに急激に上昇し、７月中旬には27℃前後まで達した（図B）。

Large temperature variation with the shift of the Kuroshio meander

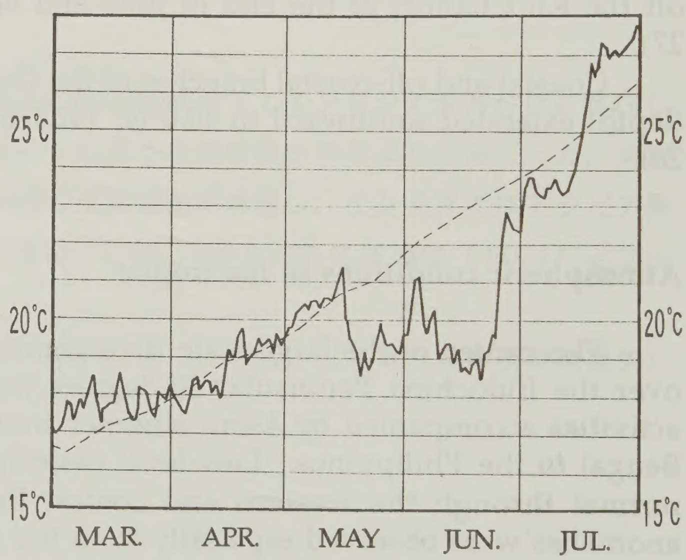
The small meander of the Kuroshio which appeared east of kyushu at the end of January 1995 moved eastward and shifted to a position off the Kii Channel in the latter half of March, then off Tokai late in April. The meander grew larger off Tokai. Thereafter the meander kept going eastward, and at the end of July it shifted to a position east of Izu Islands (Fig. A).

Large temperature variation was observed in the Izu Islands, with the shift of the meander. From the middle of May through June, sea surface temperatures at Hachijo Island were around 19℃, 3 to 4℃ below normal, from being in the cold region inside the meander. As the meander passed, SSTs increased and reached 27℃ in the middle of July (Fig. B).



図A　毎月下旬における黒潮流路（平成7年1～7月）
×印は八丈島の位置を表す。

Fig. A Path of the Kuroshio in the third ten-day period of each month (from January to July 1995).
Symbol × shows the location of Hachijo Island.



図B　八丈島の沿岸水温（平成7年3～7月）
破線は平年値を表す。

Fig. B Sea surface temperatures observed at Hachijo Island from March to July 1995. Dashed line shows the normal values (1961-1990).

DATE	SEA SURFACE TEMPERATURE AND ANOMALY (°C)								SEA LEVEL ANOMALY (cm)					
	Region D 14N-Eq. 130E-150E		Region A 4N-4S 160E-150W		Region B 4N-4S 150W-90W		Region C Eq.-10S 90W-80W		Yap 10N,138E	Rabaul 4S,152E	Majuro 7N,171E	Tarawa 1N,173E	Christ-mas 2N,157W	Santa Cruz 1S, 90W
AUG 94	29.3	+0.2	29.4	+1.0	24.6	0.0	20.6	0.0	1	0	0	-	7	-1
SEP 94	29.1	-0.1	29.1	+0.8	24.6	0.0	19.9	-0.4	-5	-	0	14	4	1
OCT 94	29.3	0.0	29.2	+0.8	25.3	+0.7	21.6	+0.9	0	-	-	10	9	4
NOV 94	29.3	+0.1	29.5	+1.1	25.6	+1.0	22.4	+0.9	5	2	-5	-	7	10
DEC 94	28.8	-0.1	29.4	+1.2	26.0	+1.1	23.6	+1.0	-1	2	-5	-	6	9
JAN 95	28.3	-0.2	29.0	+1.0	26.2	+0.8	25.7	+1.4	-3	-2	2	7	8	7
FEB 95	28.2	-0.1	28.9	+0.9	26.8	+0.6	26.1	+0.4	-7	-2	5	5	2	5
MAR 95	28.2	-0.2	28.8	+0.7	26.9	0.0	25.8	-0.1	2	6	6	2	0	-2
APR 95	28.7	-0.1	28.8	+0.6	26.9	-0.2	24.6	-0.5	-7	10	11	1	-3	-11
MAY 95	29.2	+0.1	29.0	+0.5	26.2	-0.4	23.1	-0.8	-3	6	6	4	2	-8
JUN 95	29.6	+0.3	29.0	+0.5	26.0	-0.1	22.2	-0.5	-1	-	-1	2	0	-2
JUL 95	29.5	+0.3	28.7	+0.2	25.3	+0.1	21.7	+0.1						

第１表（ａ）　エルニーニョ監視指数

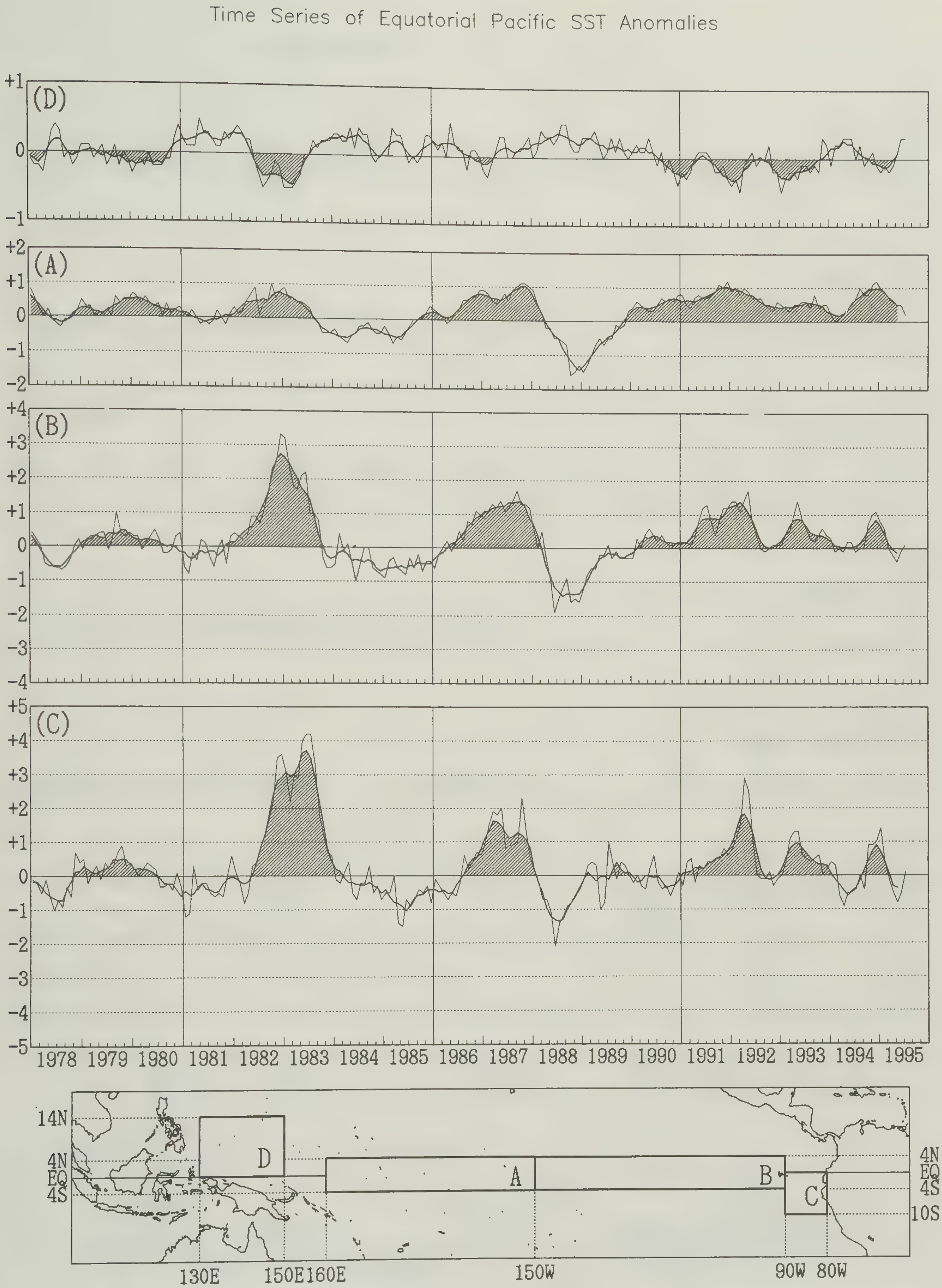
Table 1 (a) El Niño monitoring indices. Data sources are the El Niño Monitoring Center of JMA for the sea surface temperature and anomaly and SOC for ISLP-Pac, Department of Oceanography, University of Hawaii for the sea level anomaly.

DATE	SOI	SEA LEVEL PRESSURE ANOMALIES		HIGH CLOUD AMOUNT INDEX			EQUATORIAL ZONAL WIND INDEX				
		TAHITI 17°33'S, 149°37'W	DARWIN 12°24'S, 130°52'E	HCLD-PH 20N-10N 110E-140E	HCLD-MC 5N-5S 110E-135E	HCLD-DL 5N-5S 170E-170W	U200-IN 5N-5S 80E-100E	U200-CP 5N-5S 180 -125W	U850-WP 5N-5S 160E-175W	U850-CP 5N-5S 170W-135W	U850-EP 5N-5S 130W-100W
AUG 94	-1.8	-0.7	2.0	-0.9	-1.1	0.4	-0.6	0.0	0.6	0.0	-1.8
SEP 94	-1.6	-1.5	1.5	0.2	-1.1	1.4	-0.9	0.1	0.4	0.3	0.9
OCT 94	-1.5	-1.1	1.2	-0.6	-1.9	0.2	1.1	-0.9	0.9	1.2	0.8
NOV 94	-0.6	-0.2	0.9	-3.4	-1.3	1.9	0.5	-0.3	1.2	1.2	1.6
DEC 94	-1.2	-0.3	1.8	-0.7	-0.2	2.6	0.5	0.1	1.2	-0.2	0.1
JAN 95	-0.4	-0.3	0.6	-1.1	-0.4	1.2	-0.4	-0.2	-0.3	-0.6	0.3
FEB 95	-0.2	0.6	1.1	-0.7	-0.3	0.3	-0.8	-0.5	-0.4	0.1	-0.1
MAR 95	0.4	0.3	-0.5	-0.7	0.3	-0.3	-0.2	-0.1	-0.7	-0.4	-0.3
APR 95	-1.4	-1.6	0.0	-1.1	-0.2	-0.6	0.7	0.0	0.0	-0.2	0.1
MAY 95	-1.1	-0.7	0.6	0.3	-1.2	-0.1	-0.9	0.1	0.0	-0.1	0.2
JUN 95	-0.1	0.3	0.4	-1.8	-0.4	-0.7	0.2	0.2	-0.9	-0.4	0.6
JUL 95	0.4	0.4	-0.4	1.5	-0.1	-0.7	-1.1	-0.1	-0.8	-0.8	0.3

第１表（ｂ）　エルニーニョ監視指数（続き）

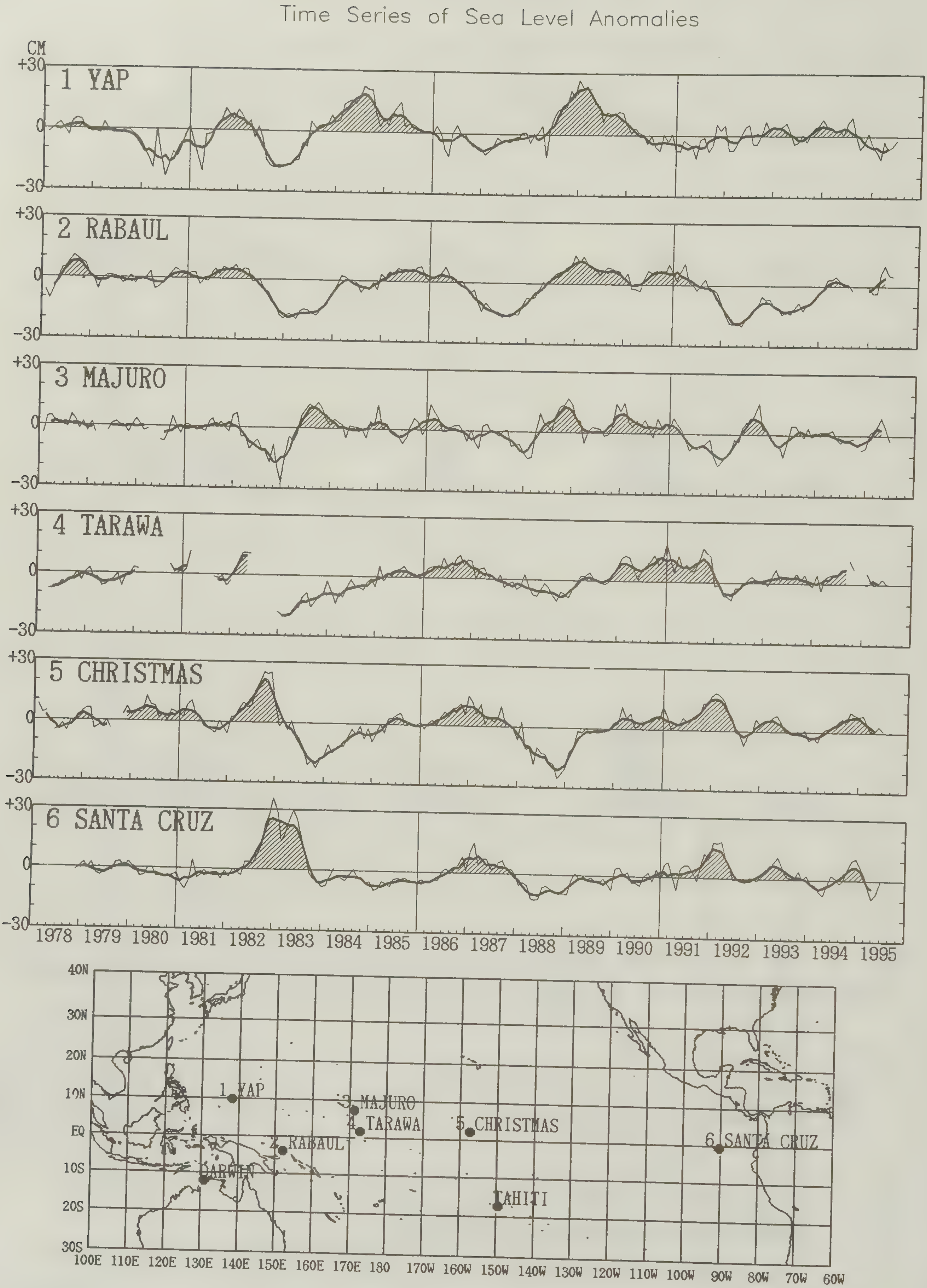
Table 1 (b)　El Niño monitoring indices (continued).

Data sources are the Long-range Forecast Division of JMA for the atmospheric conditions.



第1図　太平洋赤道域の海面水温偏差時系列図

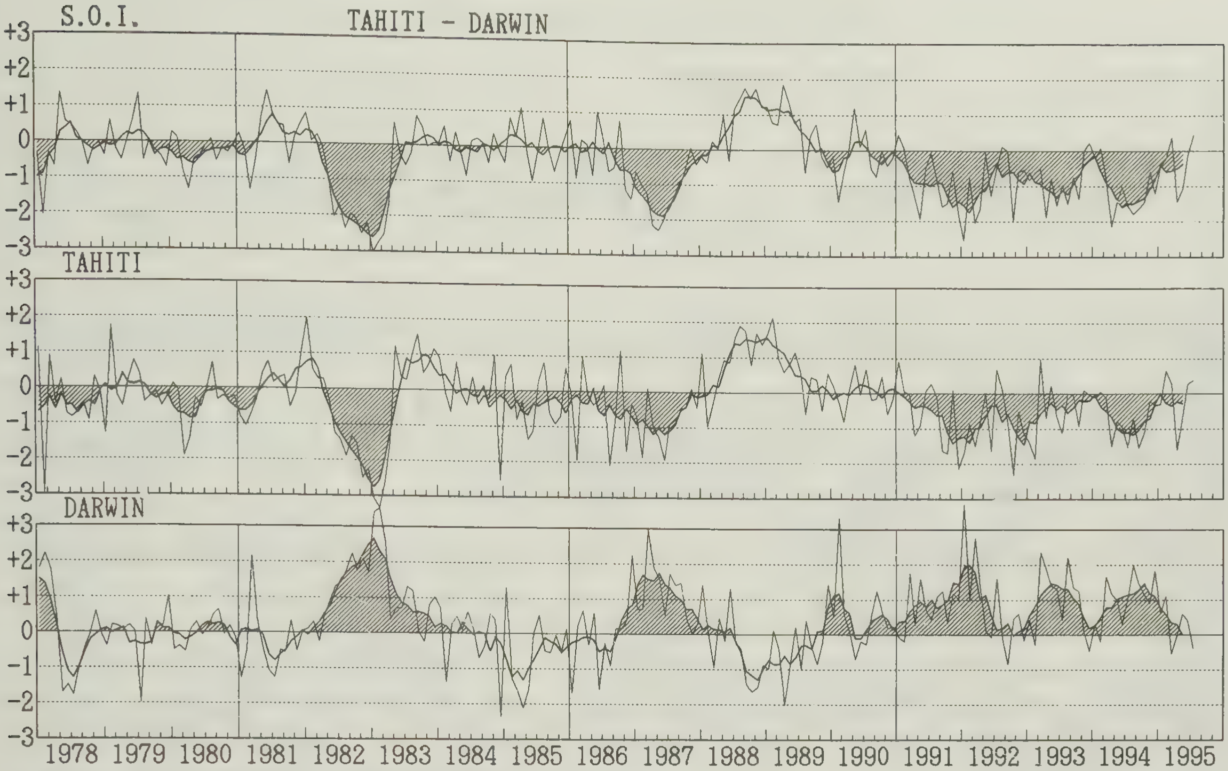
Fig.1 Time series of monthly mean SST anomalies (° C) in the equatorial Pacific Ocean for the areas indicated at the bottom.
Thin lines show the monthly means and thick lines their 5-month running means. Positve anomalies (A, B, C) and negative anomalies (D) are shaded. Anomalies are computed from the JMA climatology (1961-1990).



第2図　太平洋月平均海面水位偏差時系列図

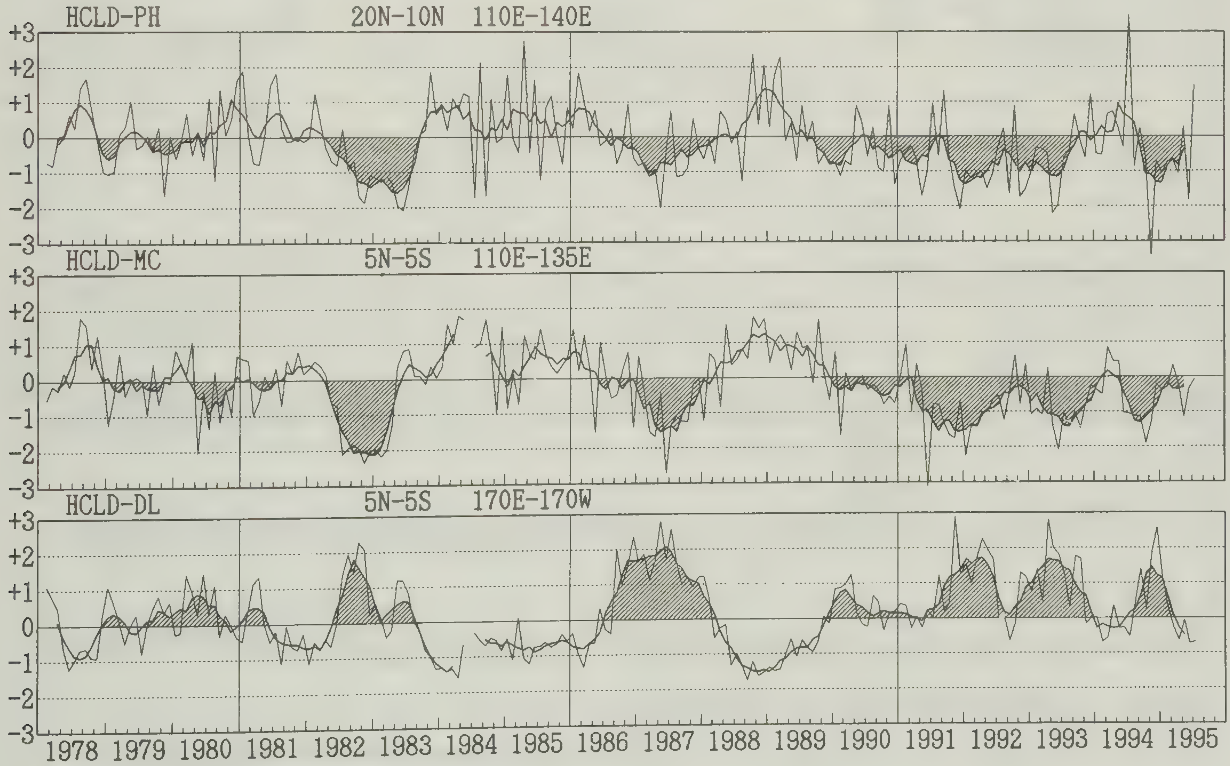
Fig.2 Time series of sea level anomalies computed from 1976–1990 monthly mean values obtained from the stations indicated at the bottom. Thin lines show the monthly mean and thick lines their 5–month running means. Positive anomalies are shaded.

Time Series of SOI and High-Cloud Amount Index



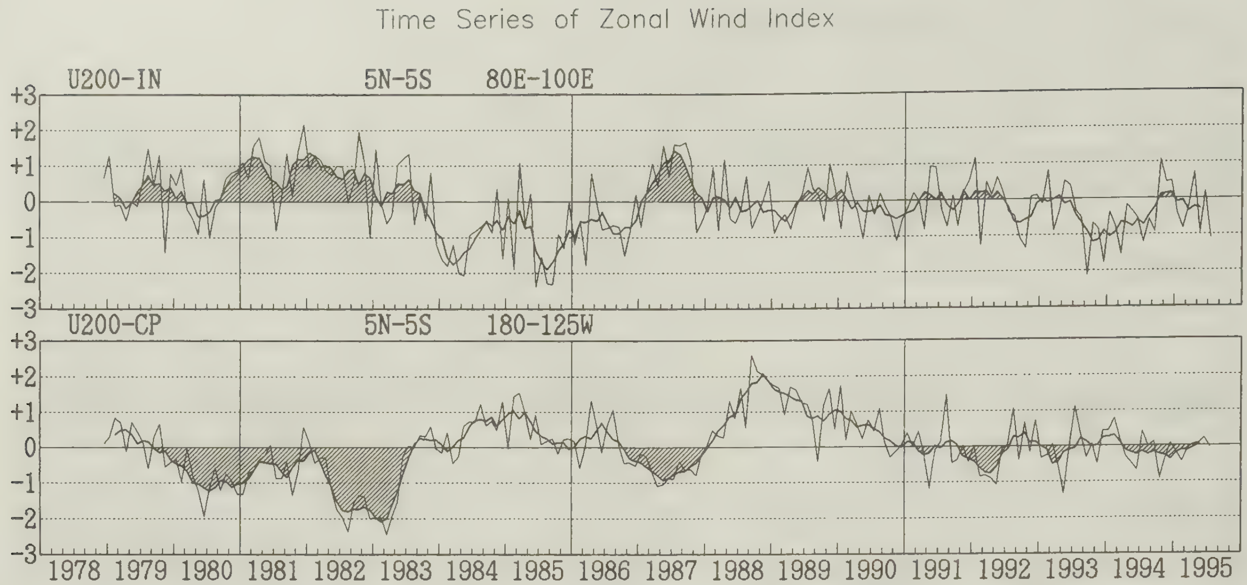
第3図　南方振動指数及び海面気圧偏差時系列図

Fig.3 Time series of the Southern Oscilation Index (top) and monthly mean sea level pressure standardized anomalies at Tahiti (middle) and Darwin (bottom). Thin lines show the monthly mean and thick lines their 5-month running means. Negative anomalies (top, middle) and posotive anomalies (bottom) are shaded. Normals and standard deviations are computed from 1961-1990 base periods. Data sources are the Long-range Forecast Division of JMA.



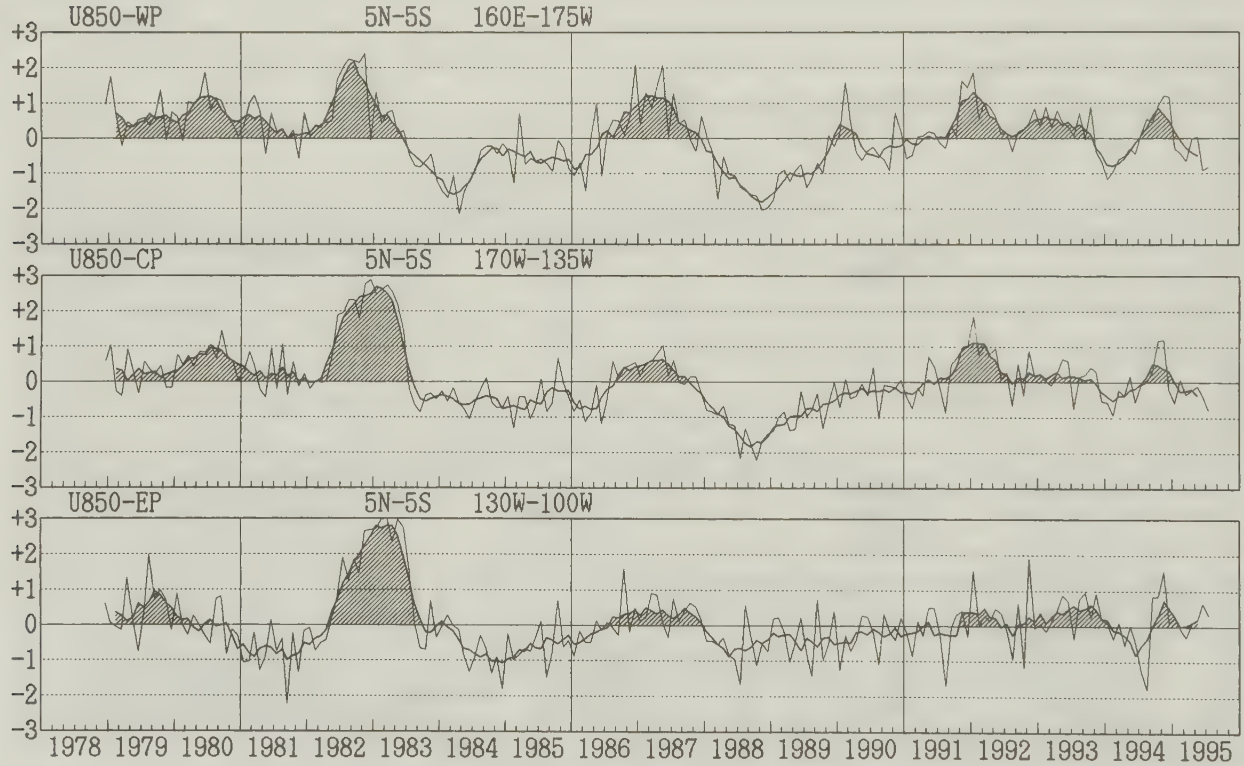
第4図　月平均上層雲量指数時系列図

Fig.4 Time series of high-cloud amount index averaged over the area 20° N-10° N, 110° E-140° E (top), 5° N-5° S, 110° E-135° E (middle), and 5° N-5° S, 170° E-170° W (bottom). Thin lines show the monthly mean and thick lines their 5-month running means. Negative anomalies (top, middle) and positive anomalies (bottom) are shaded. Normals and standard deviations are computed from 1978-1990 base periods. Data sources are the Long-range Forecast Division of JMA.



第5図-1　赤道域東西風指数(200ｈＰａ)時系列図

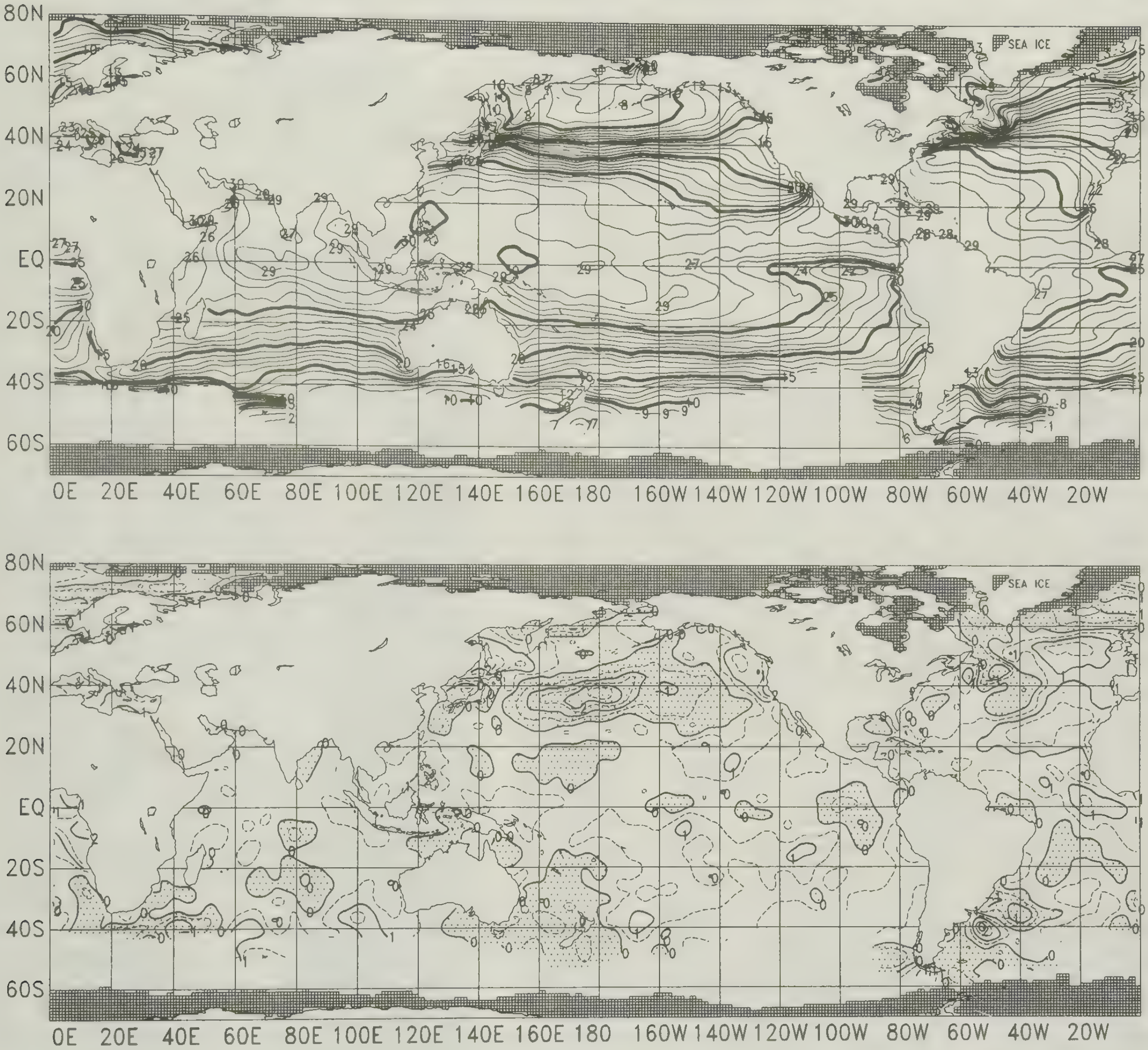
Fig.5−1 Time series of 200hPa zonal wind index averaged over the areas of 5° N−5° S, 80° E−100° E (top), and 5° N−5° S, 180° −125° W (bottom). Thin lines show the monthly mean and thick lines their 5−month running means. Positive anomalies (top) and negative anomalies (bottom) are shaded. Normals and standard deviations are computed from 1979−1990 base periods. Data sources are the Long−range Forecast Division of JMA.



第5図-2　赤道域東西風指数(850ｈＰａ)時系列図

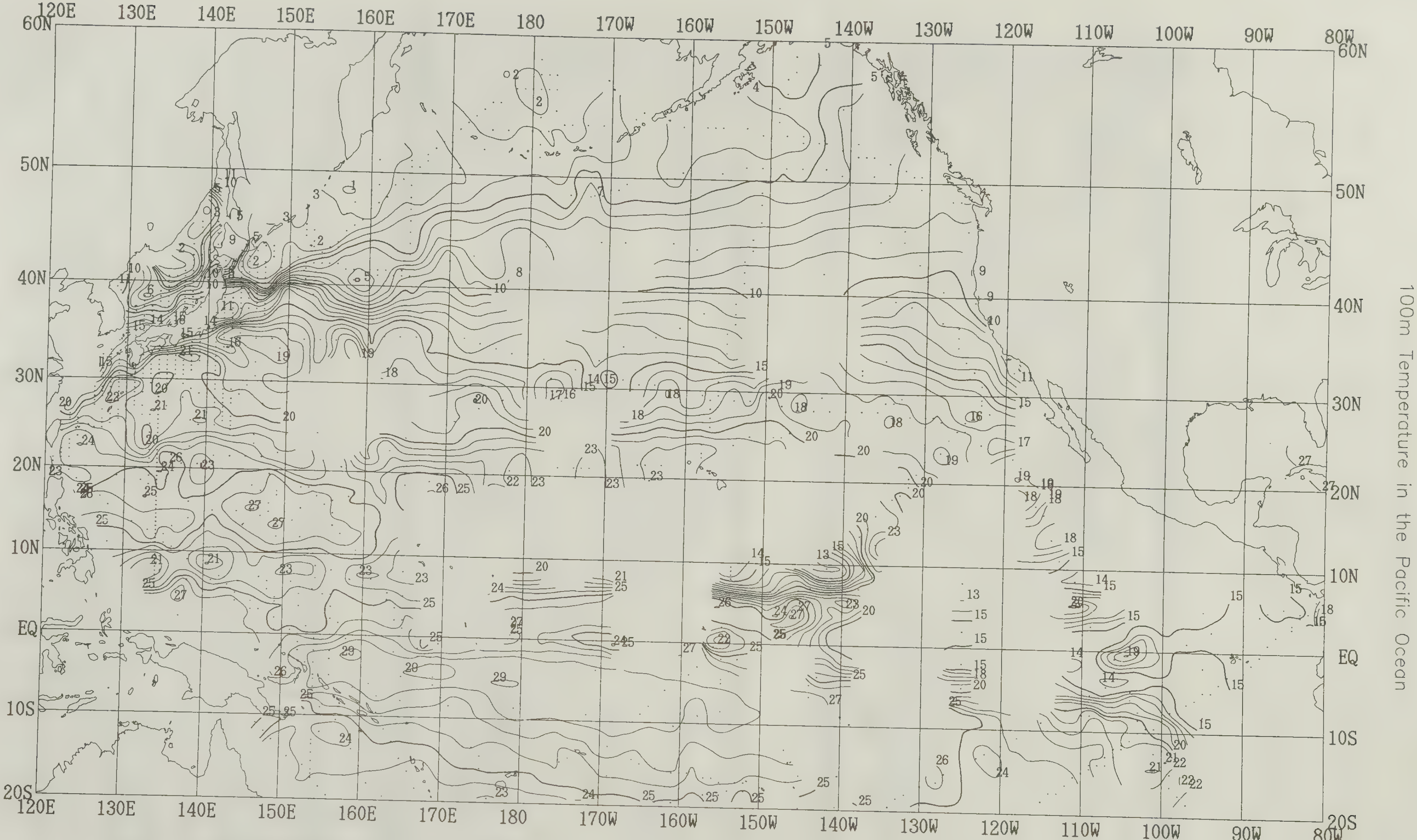
Fig.5−2 Time series of 850hPa zonal wind index averaged over the areas of 5° N−5° S, 160° E−175° W (top), 5° N−5° S, 170° W−135° W (middle), and 5° N−5° S, 130° W−100° W (bottom). Thin lines show the monthly mean and thick lines their 5−month running means. Positive anomalies are shaded. Normals and standard deviations are computed from 1979−1990 base periods. Data sources are the Long−range Forecast Division of JMA.

SST & Anomalies in the Global Ocean



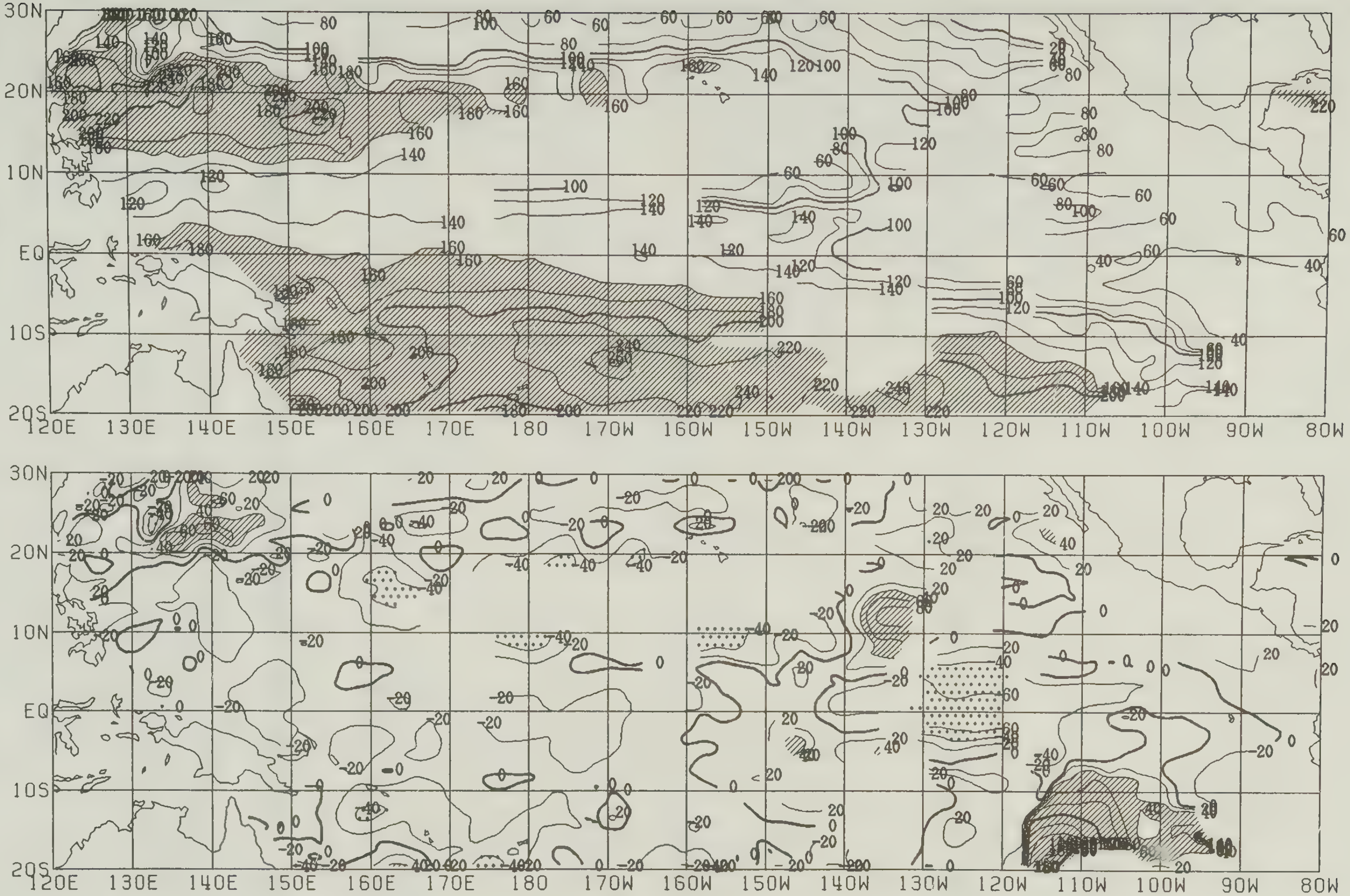
第6図　全球月平均海面水温図（上）及び偏差図（下）（1995年 7月）

Fig.6 Monthly mean sea surface temperature over the global ocean (top) and anomalies (bottom) for JUL 1995. Anomalies are computed from the JMA climatology (1961–1990) (Marine Department of JMA, 1991, Climatic charts of sea surface temperatures of the western North Pacific and the global ocean). Contour interval is 1° C (top) and additional anomaly contours of ±0.5° C are shown as broken lines. Negative anomalies are spotted. Maximum coverage of sea ice is shaded. Data sources for sea ice are U.S. National Ice Center (polar regions) and JMA (the Sea of Okhotsk).



第7図　太平洋表層水温(深さ100m)図 (1995年 7月)

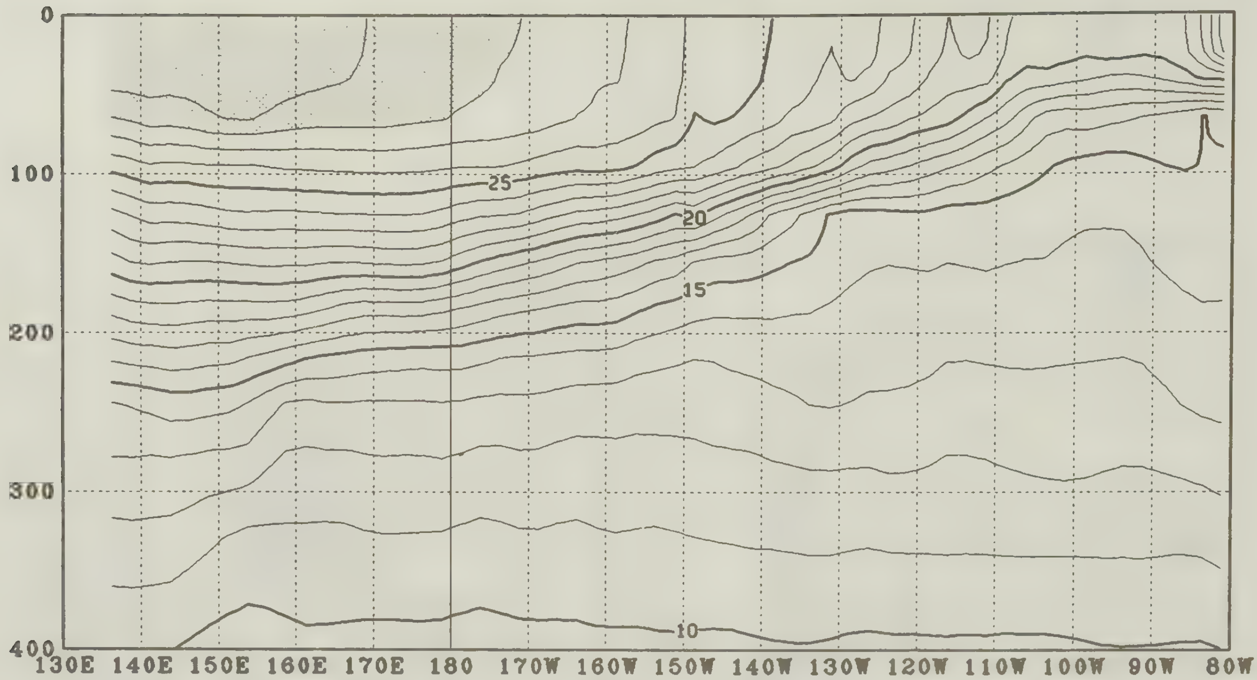
Fig.7 Subsurface (100m) temperatures in the Pacific Ocean for JUL 1995 .
Contour interval is 1° C. Observation points are denoted by dots.

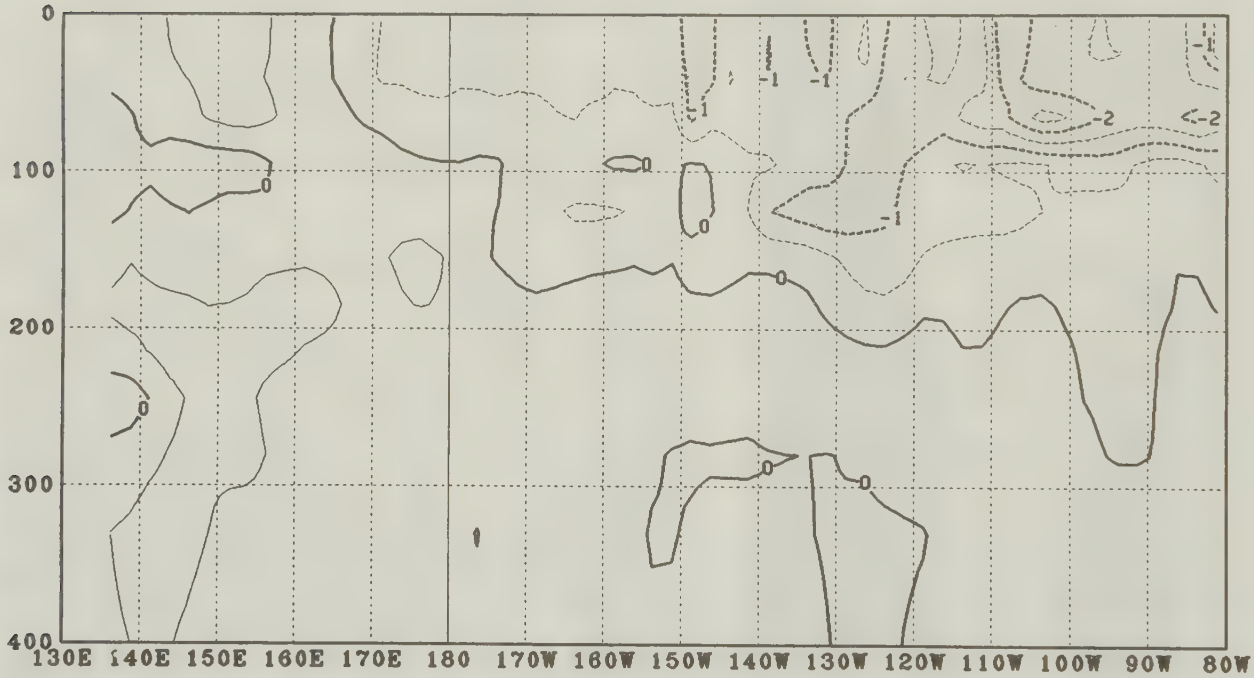


第8図　太平洋表層水温（20℃深度）図（上）及び偏差図（下）（1995年 7月）

Fig.8 Depth of the 20° C isotherm in the Pacific Ocean (top) and anomalies (bottom) for JUL 1995. Anomalies are computed from the climatology (Levitus, 1982, Climatological Atlas of the World Ocean, NOAA). Contour interval is 20m. Values greater than 160m in top panel are shaded. In bottom panel values greater than +40m are shaded and values less than −40m are spotted.

Depth–Longitude Section of Equatorial Temperature & Anomalies

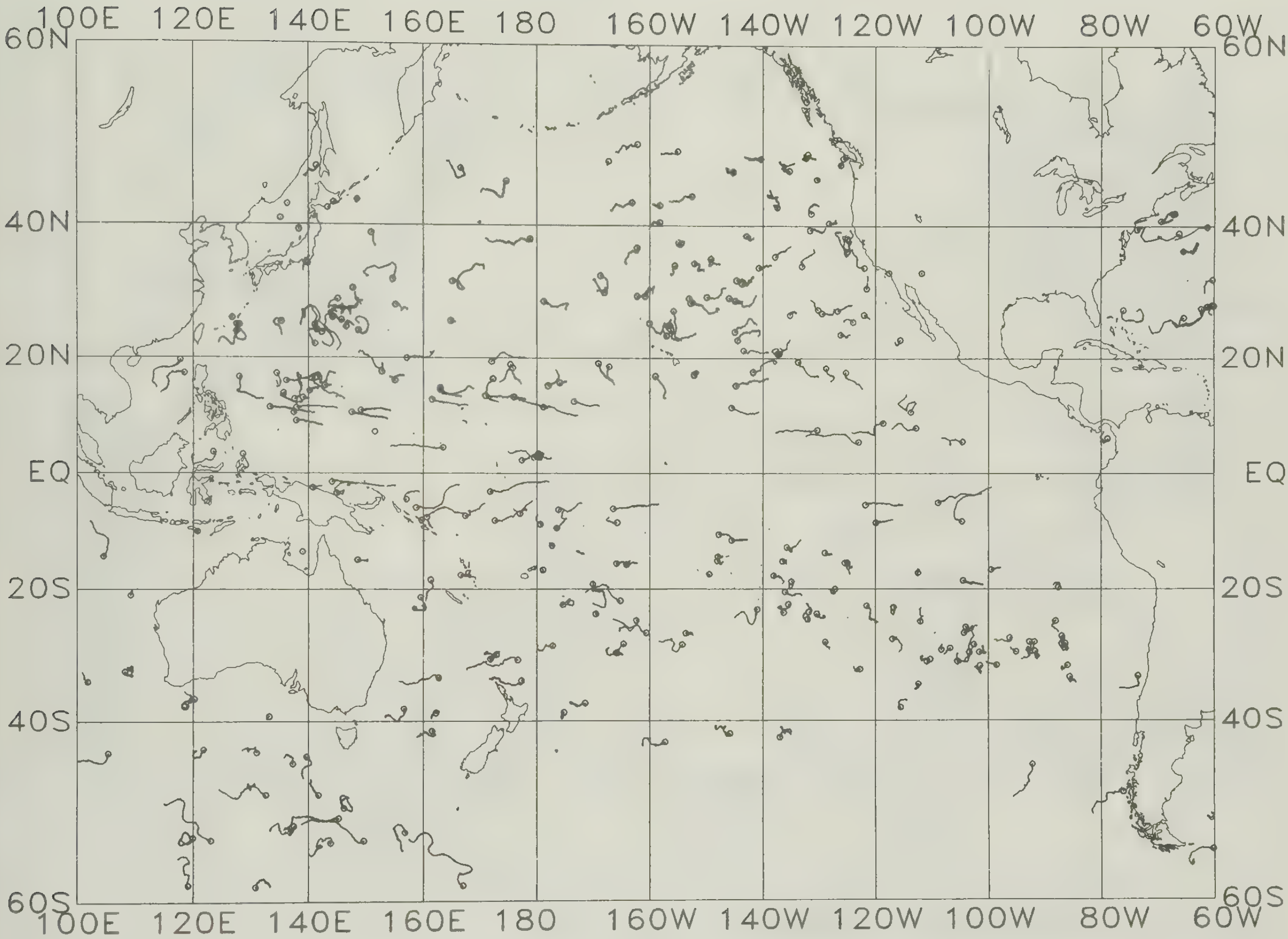




第9図　太平洋赤道に沿う表層水温（上）及び偏差（下）の深度－経度断面図（1995年 7月）

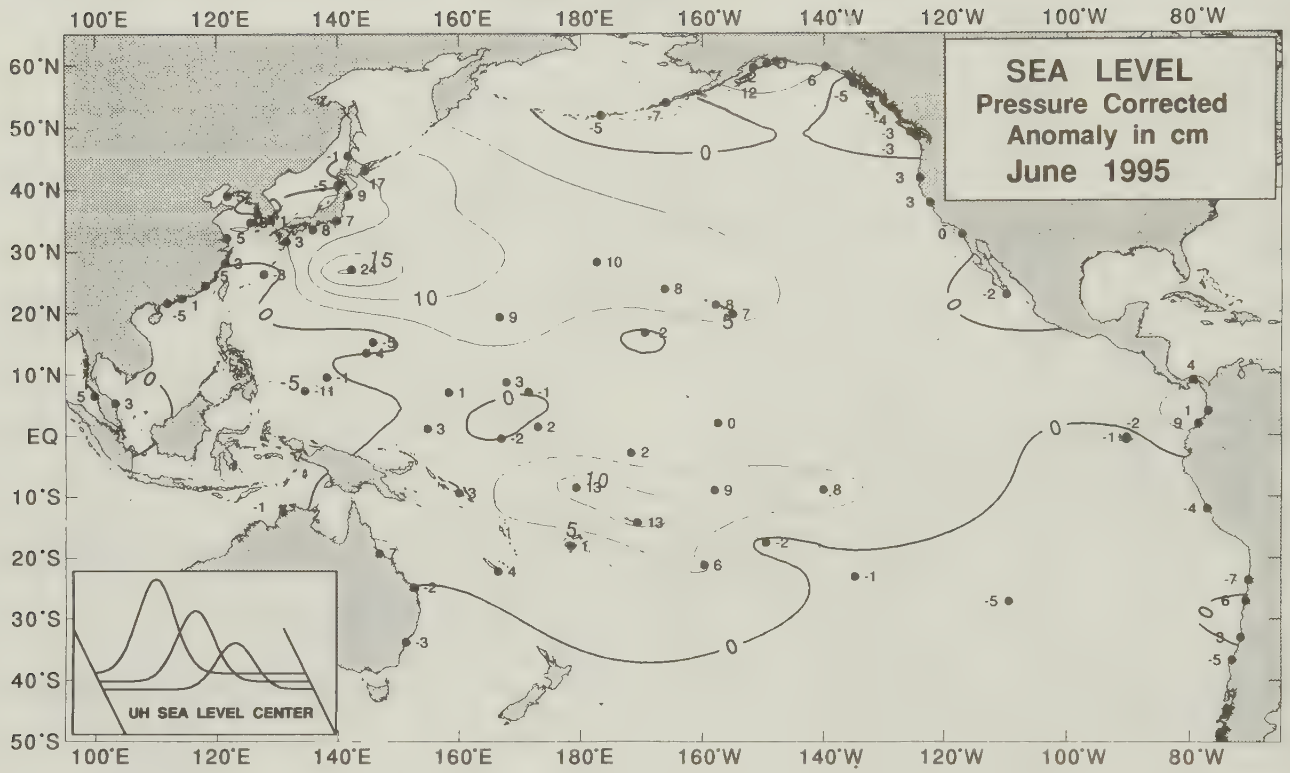
Fig.9　Depth–longitude sections of temperature (top) and anomalies (bottom) along the equator in the Pacific Ocean for JUL 1995. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 1° C (top) and 0.5° C (bottom). Values greater than 28° C in top panel are shaded. In bottom panel values greater than 1° C are shaded and values less than −1° C are spotted. Anomalies are computed from 1987–1994 base period means.

Movements of Drifting Buoys



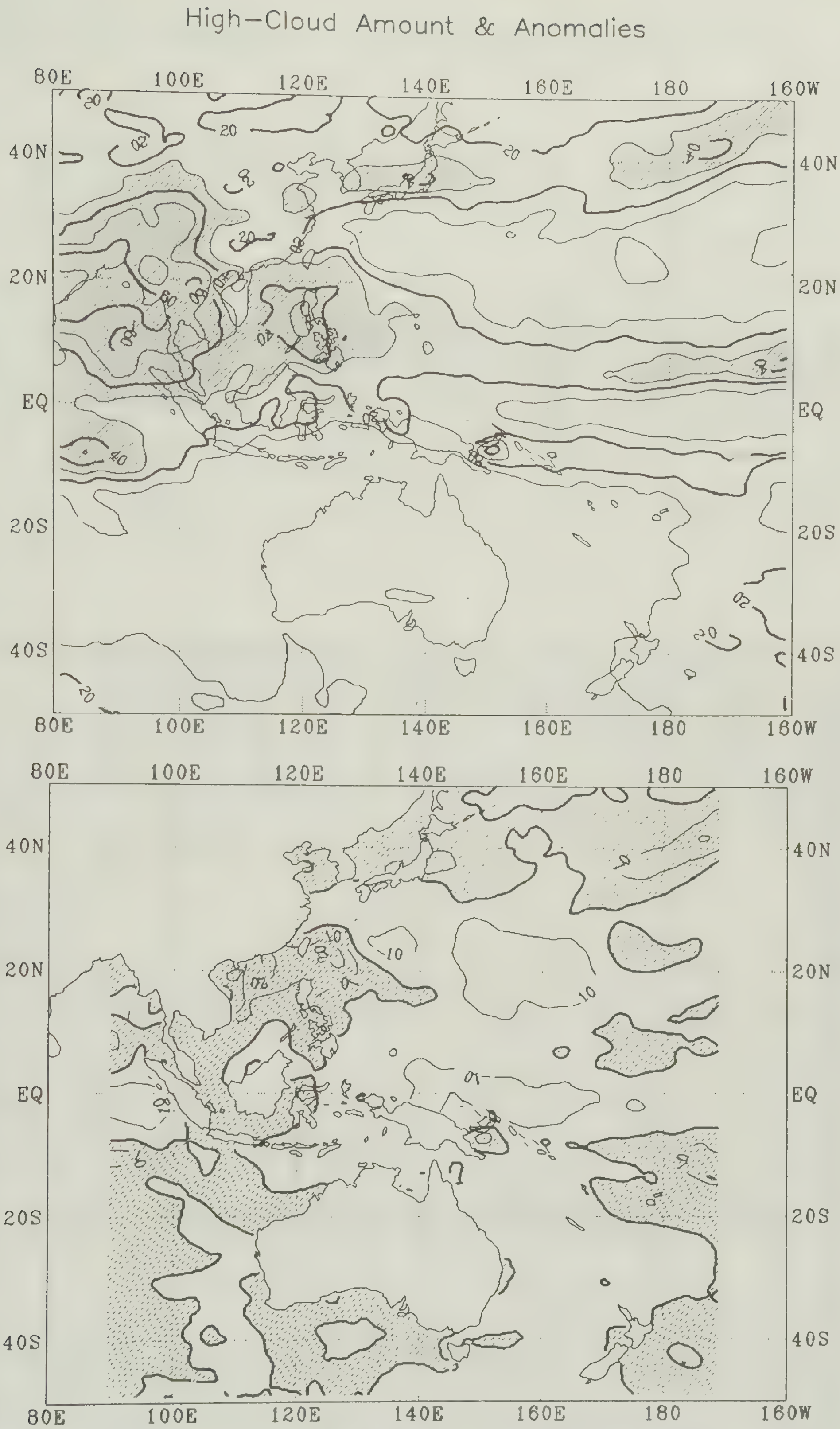
第10図　太平洋ブイ流跡図(1995年 7月)

Fig.10 Movements of drifting buoys in the Pacific Ocean during JUL 1995. Each track is for one buoy. Small circles represent last positions for the month.



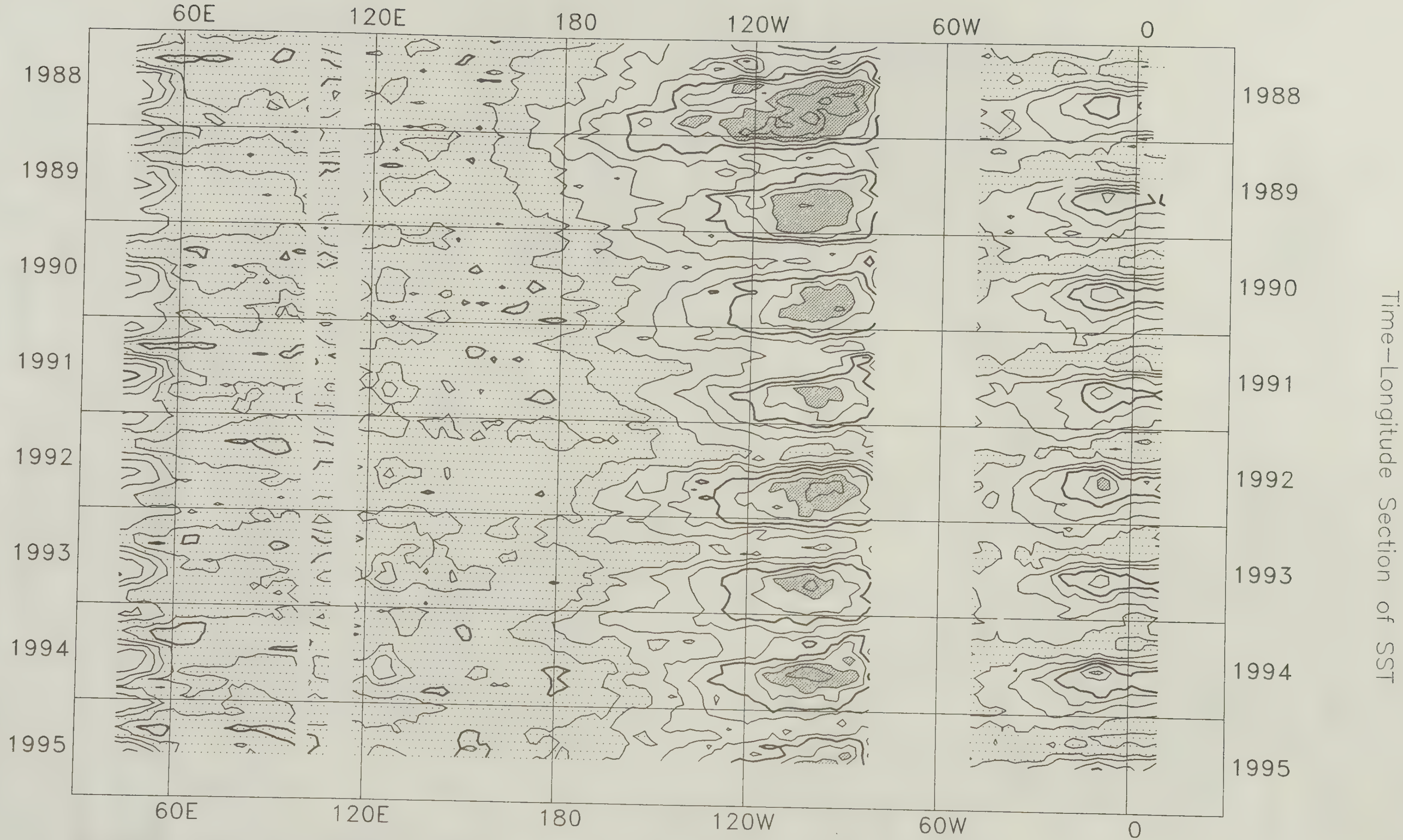
第11図　太平洋海面水位偏差図（ 1995年 6月 ）

Fig.11　Monthly sea level anomalies for JUN 1995 obtained from mean sea level (1975–1986) adjusted for atmospheric pressure.
This figure is prepared by the SOC of ISLP–PAC, Dept. of Oceanography, Univ. of Hawaii.



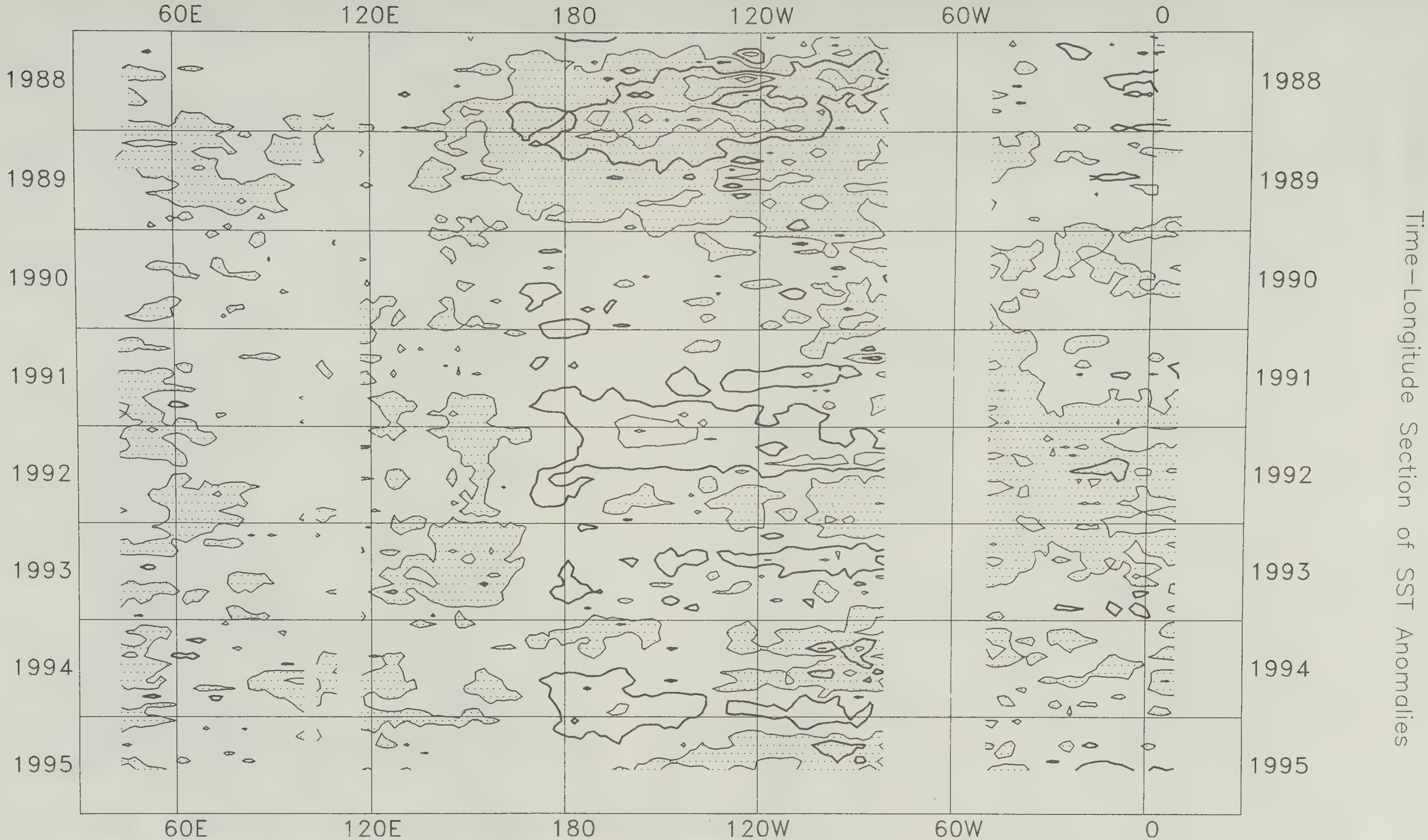
第12図　西太平洋月平均上層雲量分布図及び偏差図（1995年 7月）

Fig.12 Monthly mean of the high−cloud amount (%, top) and its anomalies (%, bottom) in the western Pacific for JUL 1995. Contour interval is 10%. Areas above 30% are shaded (top) and positive anomalies are stippled (bottom). Anomalies are computed from 1978−1990 base period means. Figures are prepared by the Long−range Forecast Division of JMA.



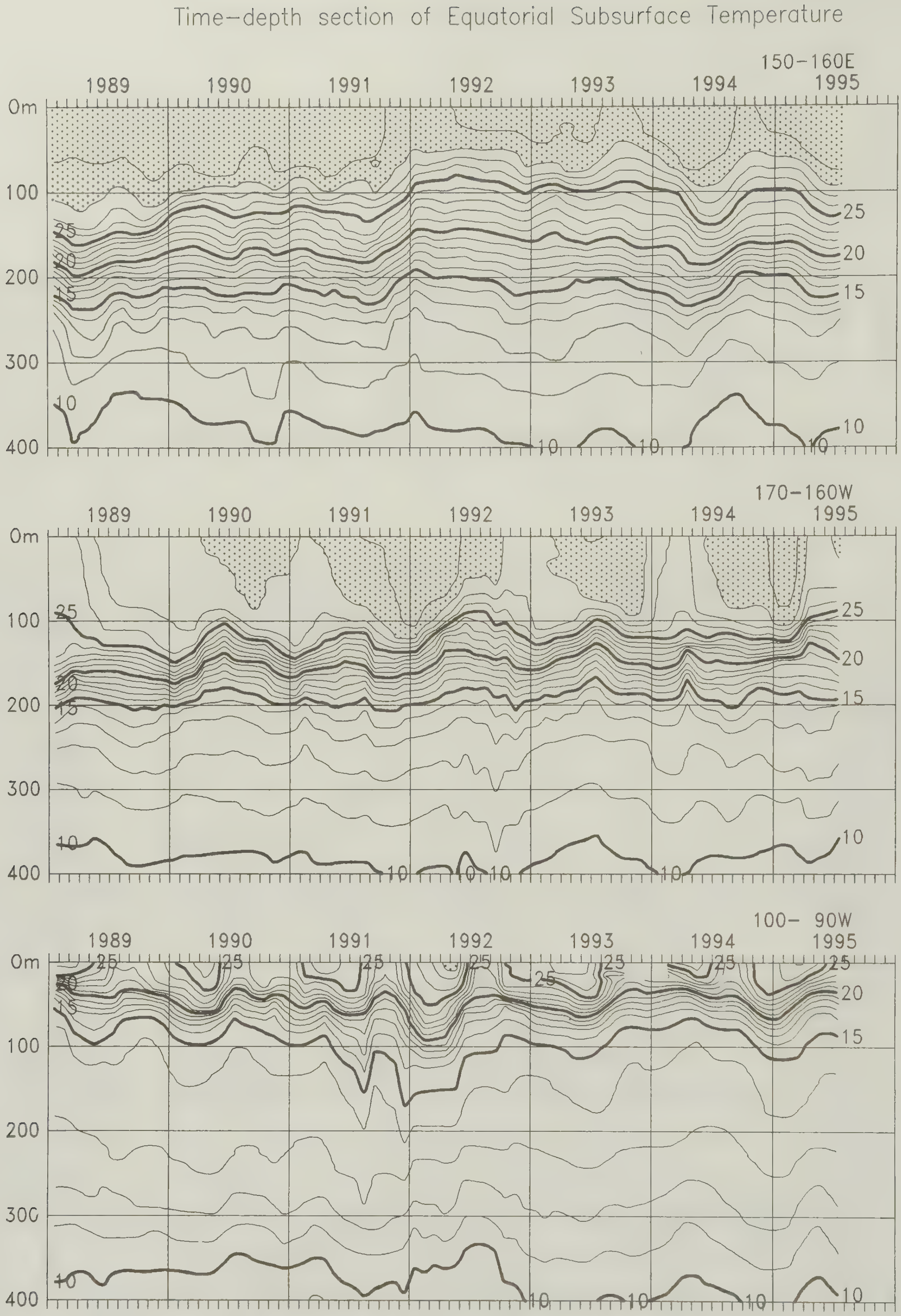
第13図　赤道に沿う海面水温の時間－経度断面図

Fig.13 Time–longitude section of SSTs along the equator (2° N–2° S) in the global ocean. Contour interval is 1° C, with thick contour lines at 25 and 30° C. SST values greater than 28° C are spotted and values less than 23° C are shaded.



第14図　赤道に沿う海面水温偏差の時間－経度断面図

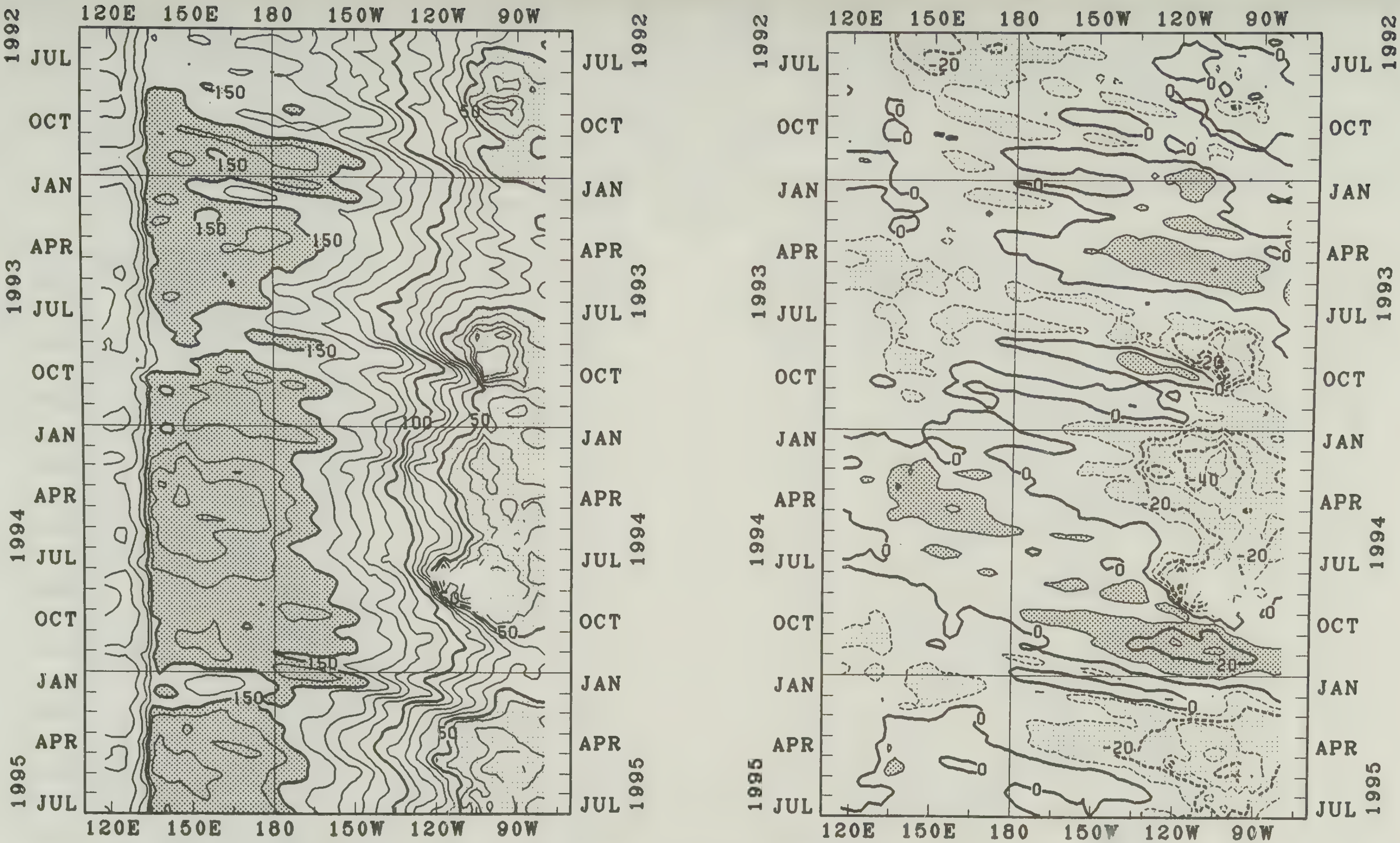
Fig.14 Time–longitude section of SST anomalies along the equator (2° N–2° S) computed from the JMA climatology (1961–1990). Contour interval is 1° C, with thick contour lines at +1° C and –1° C. Negative anomalies are spotted.



第15図　太平洋赤道域の表層水温の時間－深度断面図
（上：西部、中：中部、下：東部）

Fig.15 Time-depth section of equatorial (2° N-2° S) subsurface temperature for the western Pacific (top, 150-160° E), the central Pacific (middle, 170-160° W) and the eastern Pacific (bottom, 100-90° W). Contour interval is 1° C. Values greater than 28° C are shaded.

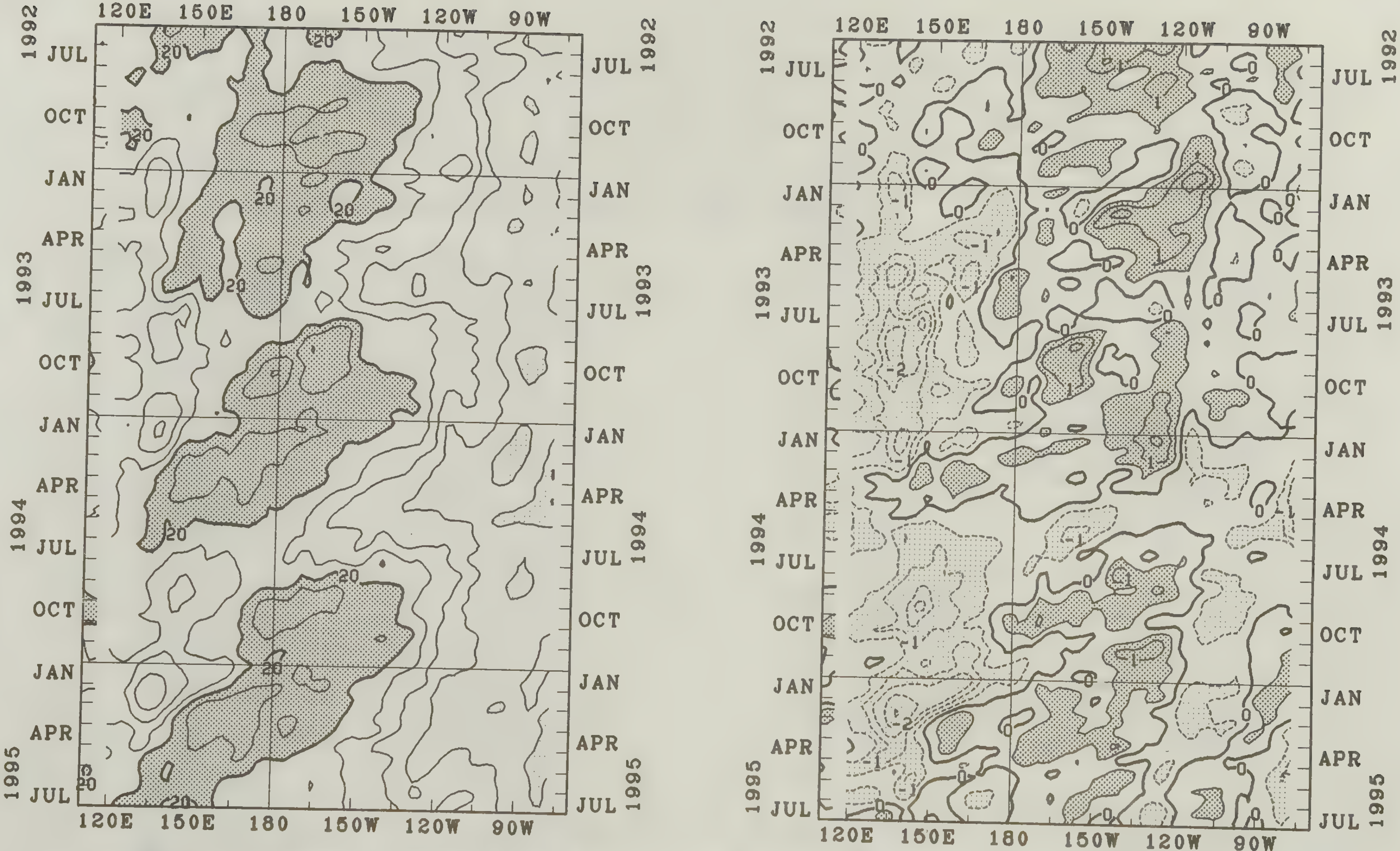
Time−Longitude Section of Depth of 20° C & Anomalies



第16図　太平洋の赤道に沿う20℃深度（左）及び偏差（右）の時間－経度断面図

Fig.16 Time−longitude sections of depth of the 20° C isotherm along the equator (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 10m. Values in left panel greater than 150m are shaded and values less than 50m are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987−1994 base period means.

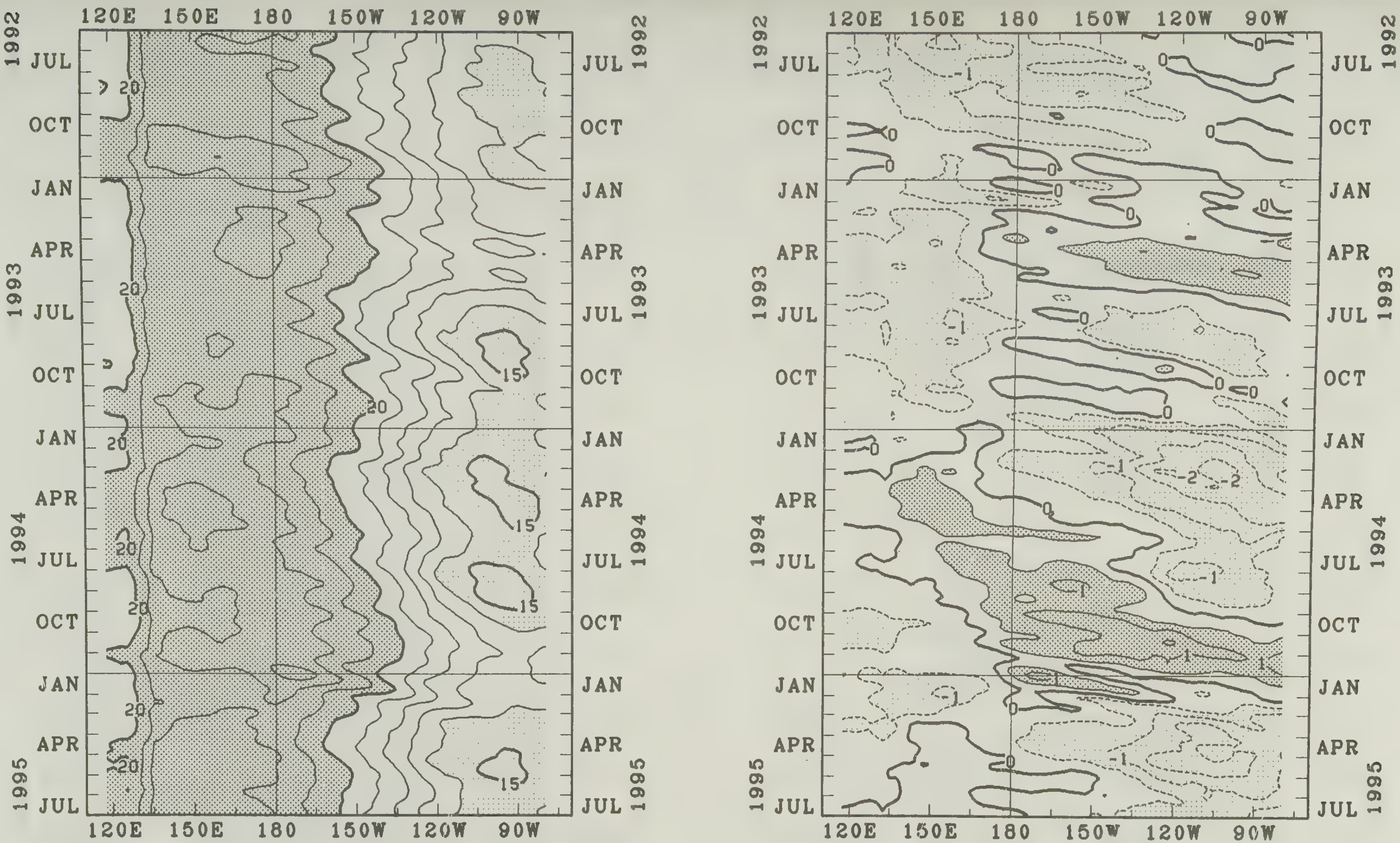
Time–Longitude Section of Ocean Heat Content & Anomalies (6° N)



第17図　太平洋の北緯6度線に沿う海洋表層の貯熱量（左）及び偏差（右）の時間－経度断面図

Fig.17 Time–longitude sections of ocean heat content in the upper 260m along 6° N (left) and anomalies (right) in the Pacific Ocean. Data are derived from an Ocean Data Assimilation System of JMA. Contour interval is 1° C (left) and 0.5° C (right). Values in the left panel greater than 20° C are shaded and values less than 16° C are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987–1994 base period means.

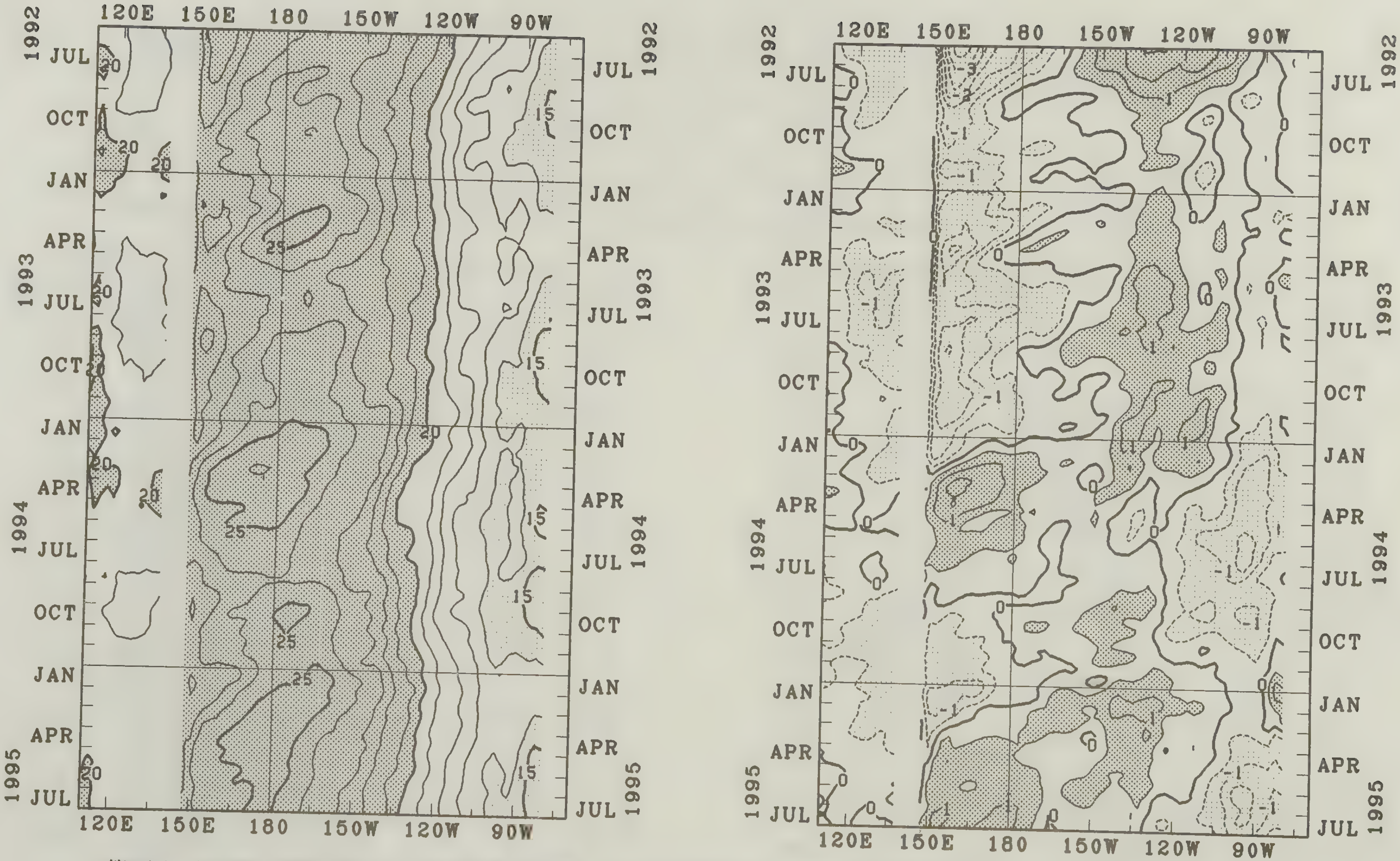
Time-Longitude Section of Ocean Heat Content & Anomalies (Eq.)



第18図　太平洋の赤道に沿う海洋表層の貯熱量（左）及び偏差（右）の時間－経度断面図

Fig.18 Time-longitude sections of ocean heat content in the upper 260m along the equator (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 1° C (left) and 0.5° C (right). Values in the left panel greater than 20° C are shaded and values less than 16° C are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987–1994 base period means.

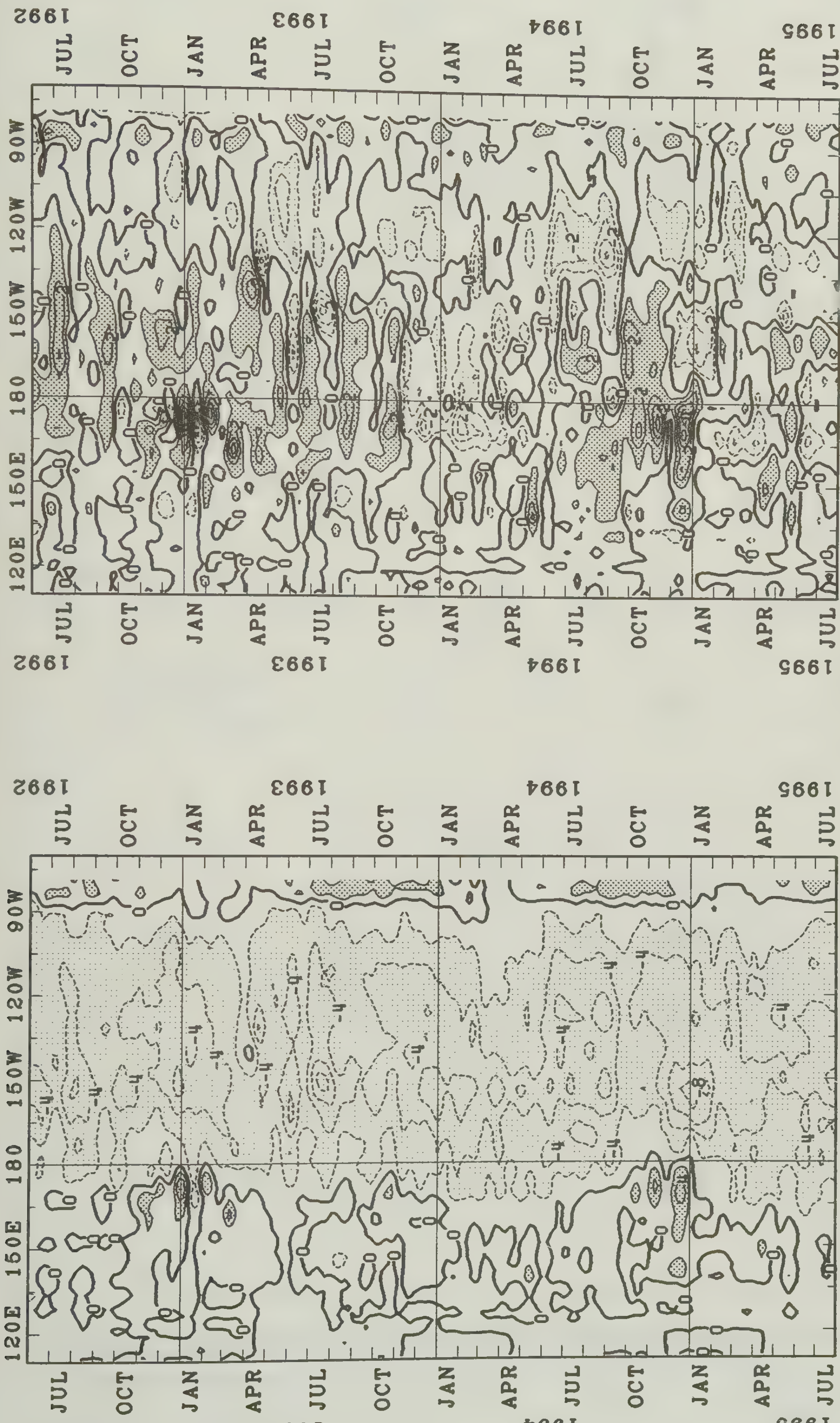
Time-Longitude Section of Ocean Heat Content & Anomalies (6° S)



第19図　太平洋の南緯6度線に沿う海洋表層の貯熱量（左）及び偏差（右）の時間－経度断面図

Fig.19 Time-longitude sections of ocean heat content in the upper 260m along 6° S (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 1° C (left) and 0.5° C (right) Values in the left panel greater than 20° C are shaded and values less than 16° C are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987–1994 base period means.

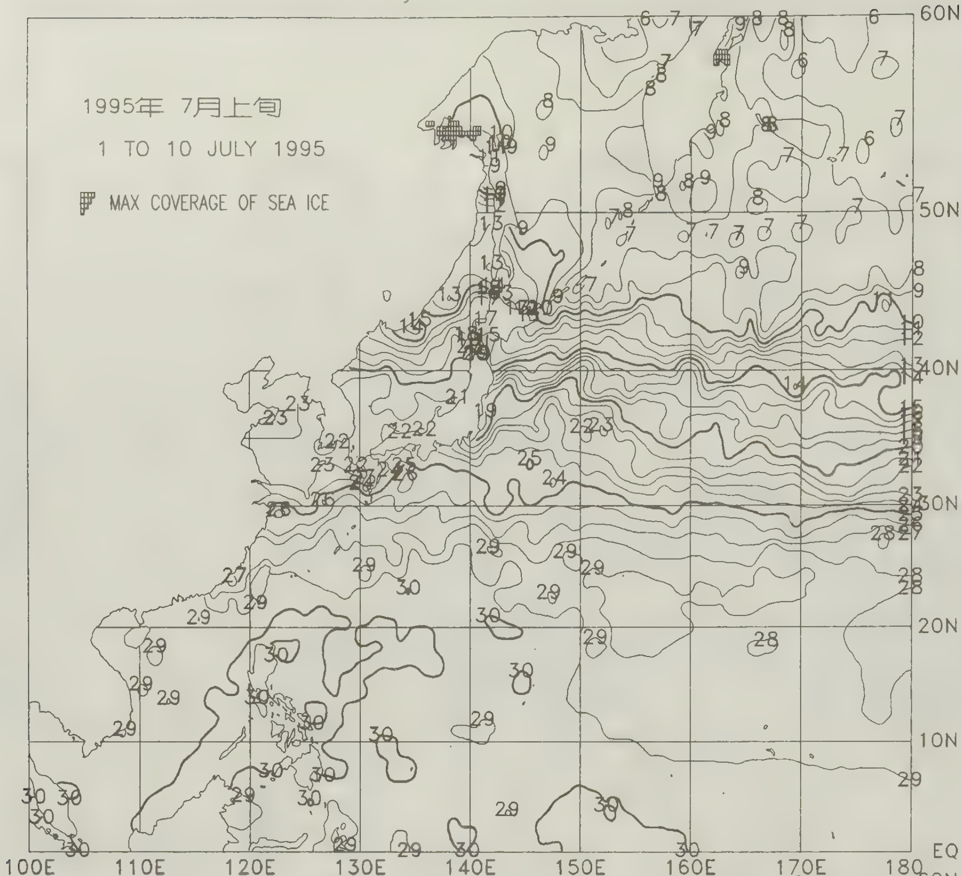
Time–Longitude Section of Surface Zonal Wind Stress & Anomalies



第20図　太平洋の赤道に沿う海面の風応力の東西成分（左）及び偏差（右）の時間－経度断面図

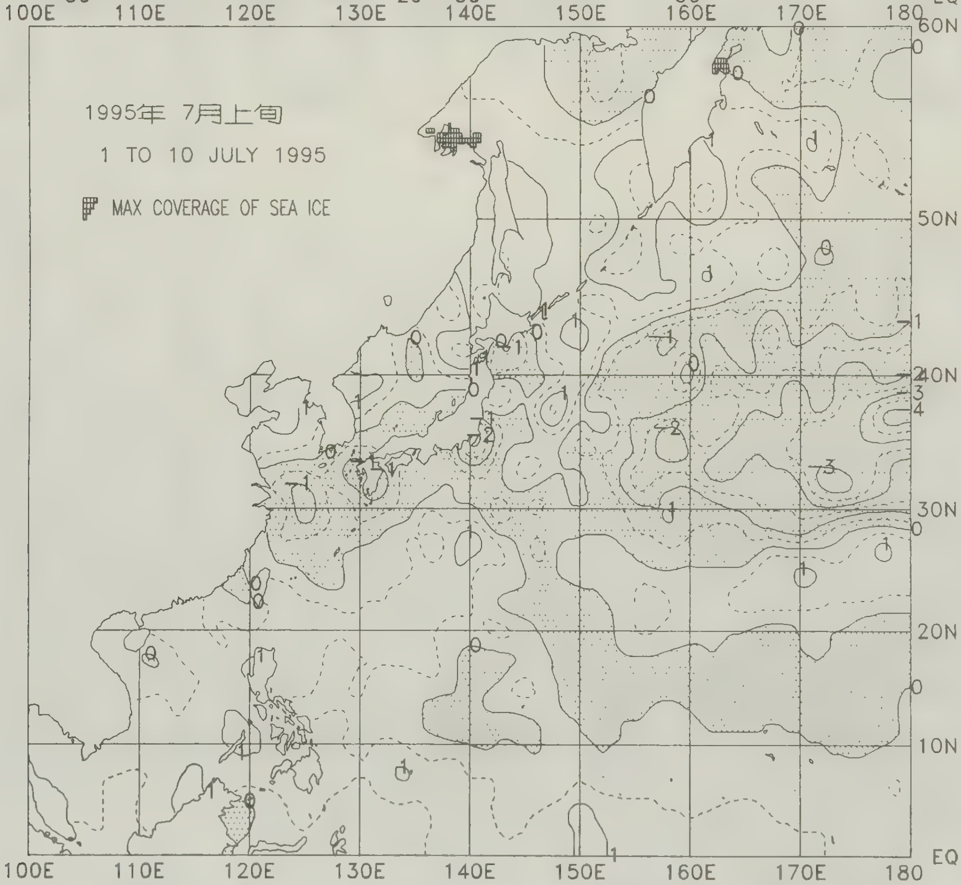
Fig.20 Time–longitude sections of surface zonal wind stress along the equator (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Atmospheric Global Data Assimilation System of JMA. Contour interval is 0.02N/m2 (left) and 0.01N/m2 (right). Dashed contours indicate easterlies (left) and easterly anomalies (right). Anomalies are computed from 1987–1994 base period means.

Ten-day mean SST & Anomalies



旬平均沿岸水温(℃)
Coastal Water Temperature

地点名 (Index Number)	水温 Temp.	偏差 Anom.
石垣島 (47918)	29.0	+0.1
御前崎 (47655)	21.4	−1.7
八丈島 (47678)	23.5	−0.5
小名浜 (47598)	17.2	−0.1
宮古 (47585)	14.4	+0.2
江差 (47428)	16.7	−
浜田 (47755)	22.2	−



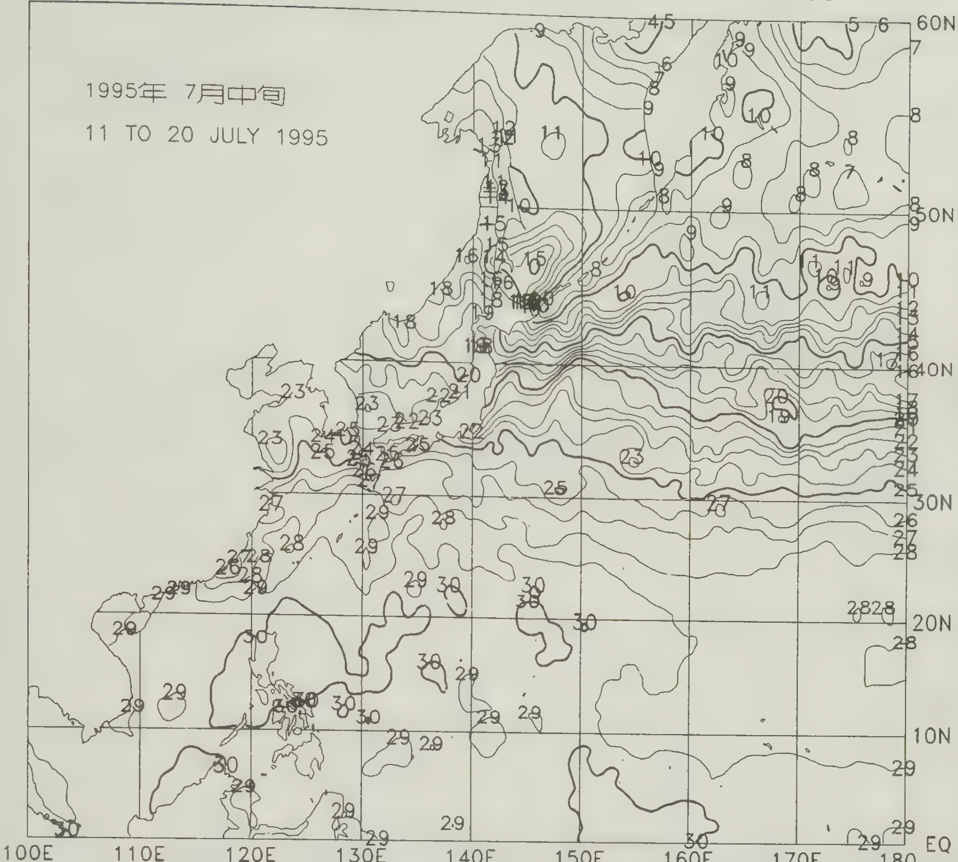
海洋気象ブイロボット
旬平均海面水温(℃)
Ocean Data Buoy SST

日本海	37.9N,134.5E	20.6
四国沖	29.0N,135.0E	27.4
東シナ海	28.2N,126.3E	27.2

第21図 北西太平洋旬平均海面水温図(上)及び偏差図(下)(1995年 7月上旬)

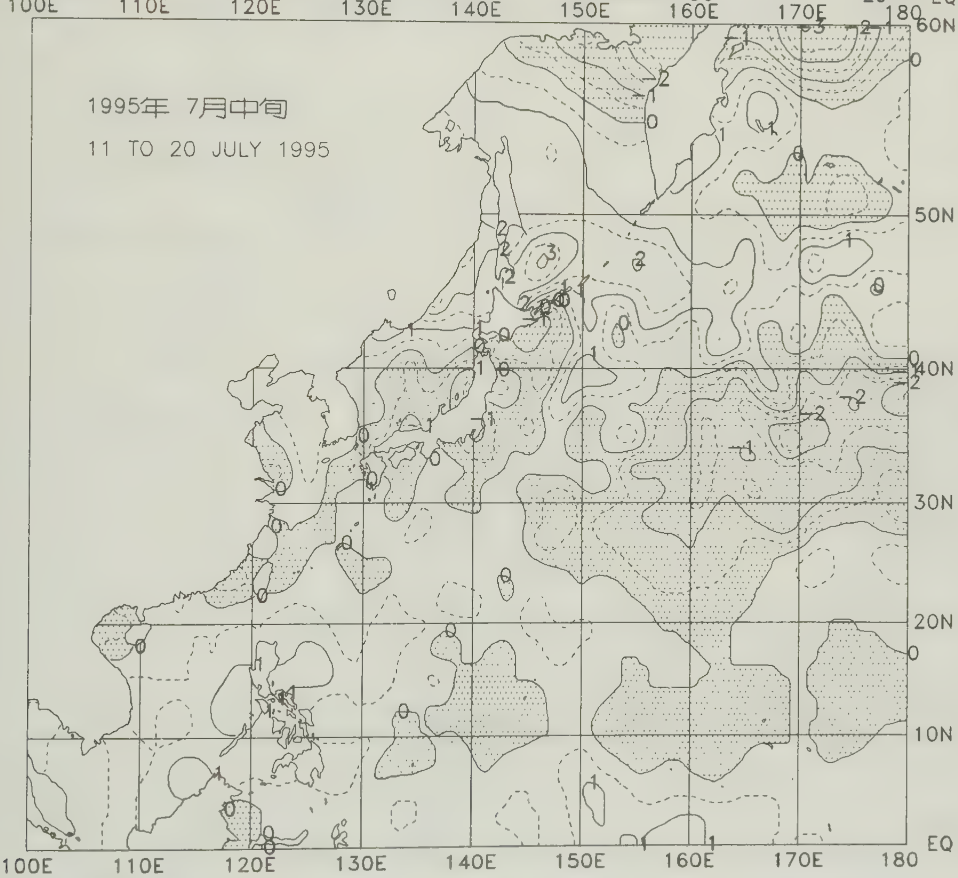
Fig.21 Ten-day mean SSTs in the western North Pacific (top) and anomalies (bottom) for the 1st ten-day period in JUL 1995. Anomalies are computed from the JMA climatology (1961–90). Contour interval is 1° C and additional anomaly contours of 0.5° C are shown as broken lines. Negative anomalies are spotted.

Ten-day mean SST & Anomalies



旬平均沿岸水温(℃)
Coastal Water Temperature

地 点 名 (Index Number)	水温 Temp.	偏差 Anom.
石垣島(47918)	28.8	−0.4
御前崎(47655)	22.4	−1.7
八丈島(47678)	24.9	+0.1
小名浜(47598)	17.7	−0.3
宮　古(47585)	15.9	+0.8
江　差(47428)	19.1	−
浜　田(47755)	24.8	−



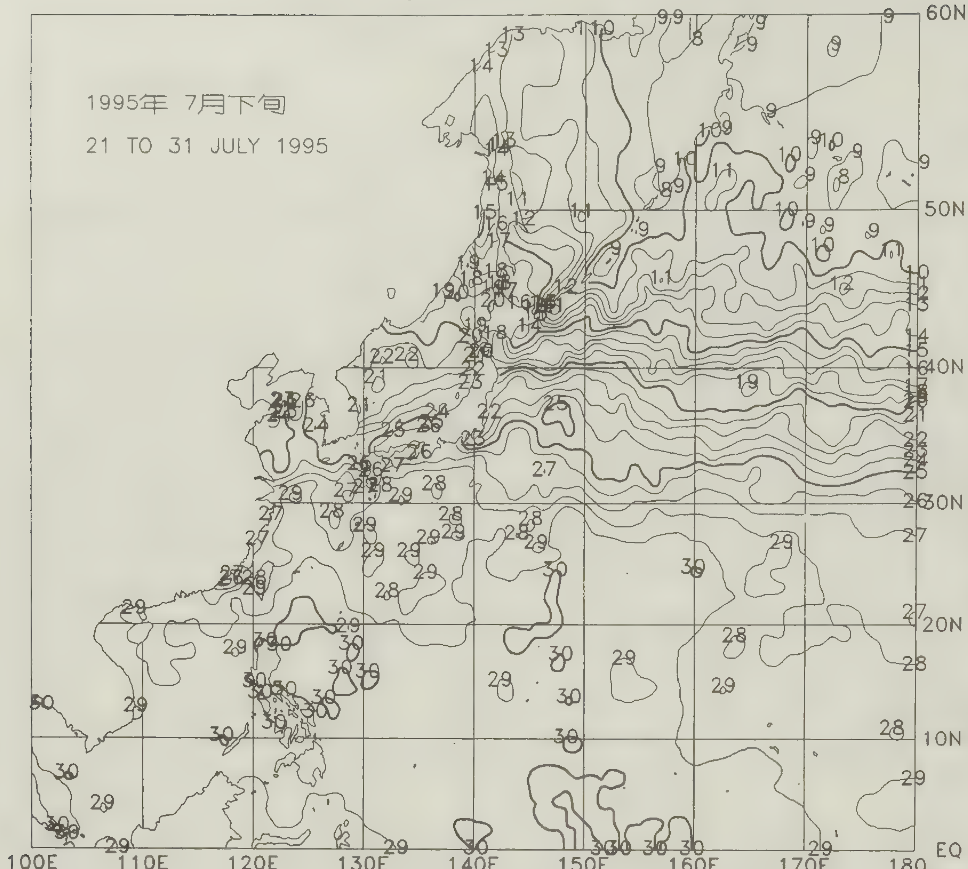
海洋気象ブイロボット
旬平均海面水温(℃)
Ocean Data Buoy SST

地点	位置	水温
日 本 海	37.9N,134.5E	21.4
四 国 沖	29.0N,135.0E	29.0
東シナ海	28.2N,126.3E	28.5

第22図 北西太平洋旬平均海面水温図(上)及び偏差図(下)(1995年 7月中旬)

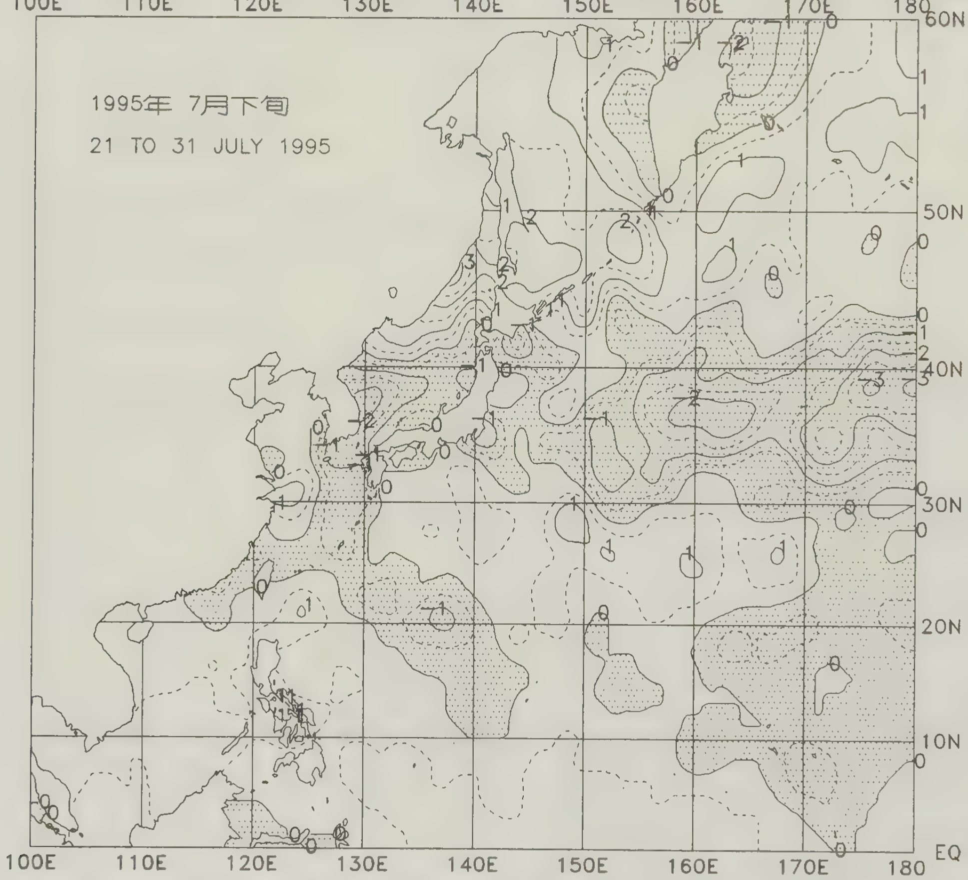
Fig.22 Ten−day mean SSTs in the western North Pacific (top) and anomalies (bottom) for the 2nd ten−day period in JUL 1995. Anomalies are computed from the JMA climatology (1961−90). Contour interval is 1° C and additional anomaly contours of 0.5° C are shown as broken lines. Negative anomalies are spotted.

Ten-day mean SST & Anomalies



旬平均沿岸水温(℃)
Coastal Water Temperature

地点名 (Index Number)	水温 Temp.	偏差 Anom.
石垣島 (47918)	29.2	0.0
御前崎 (47655)	23.5	−1.9
八丈島 (47678)	27.3	+1.5
小名浜 (47598)	19.9	+0.1
宮　古 (47585)	18.6	+1.9
江　差 (47428)	20.5	−
浜　田 (47755)	26.5	−

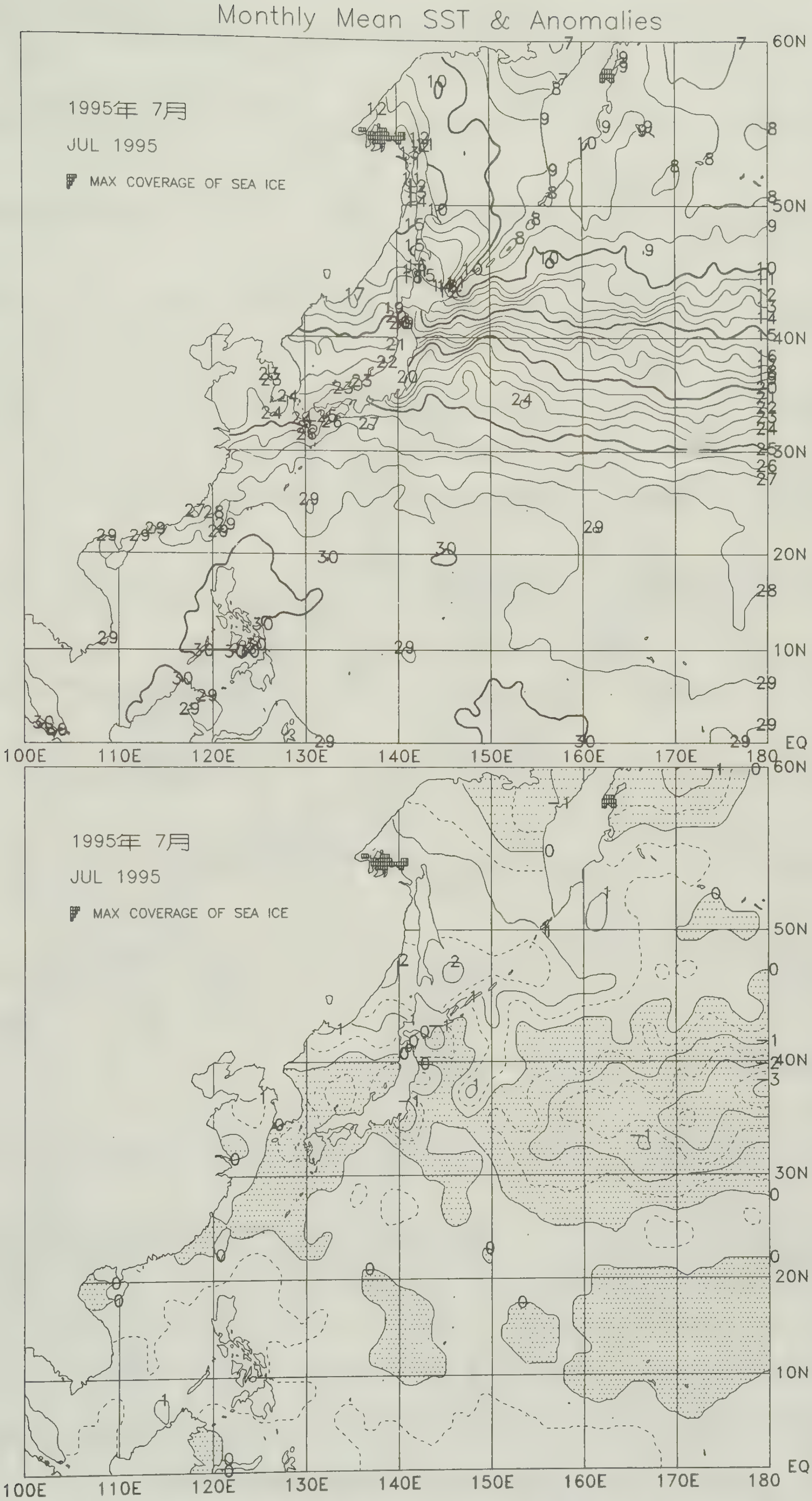


海洋気象ブイロボット
旬平均海面水温(℃)
Ocean Data Buoy SST

地点	位置	水温
日本海	37.9N,134.5E	23.1
四国沖	29.0N,135.0E	29.2
東シナ海	28.2N,126.3E	28.0

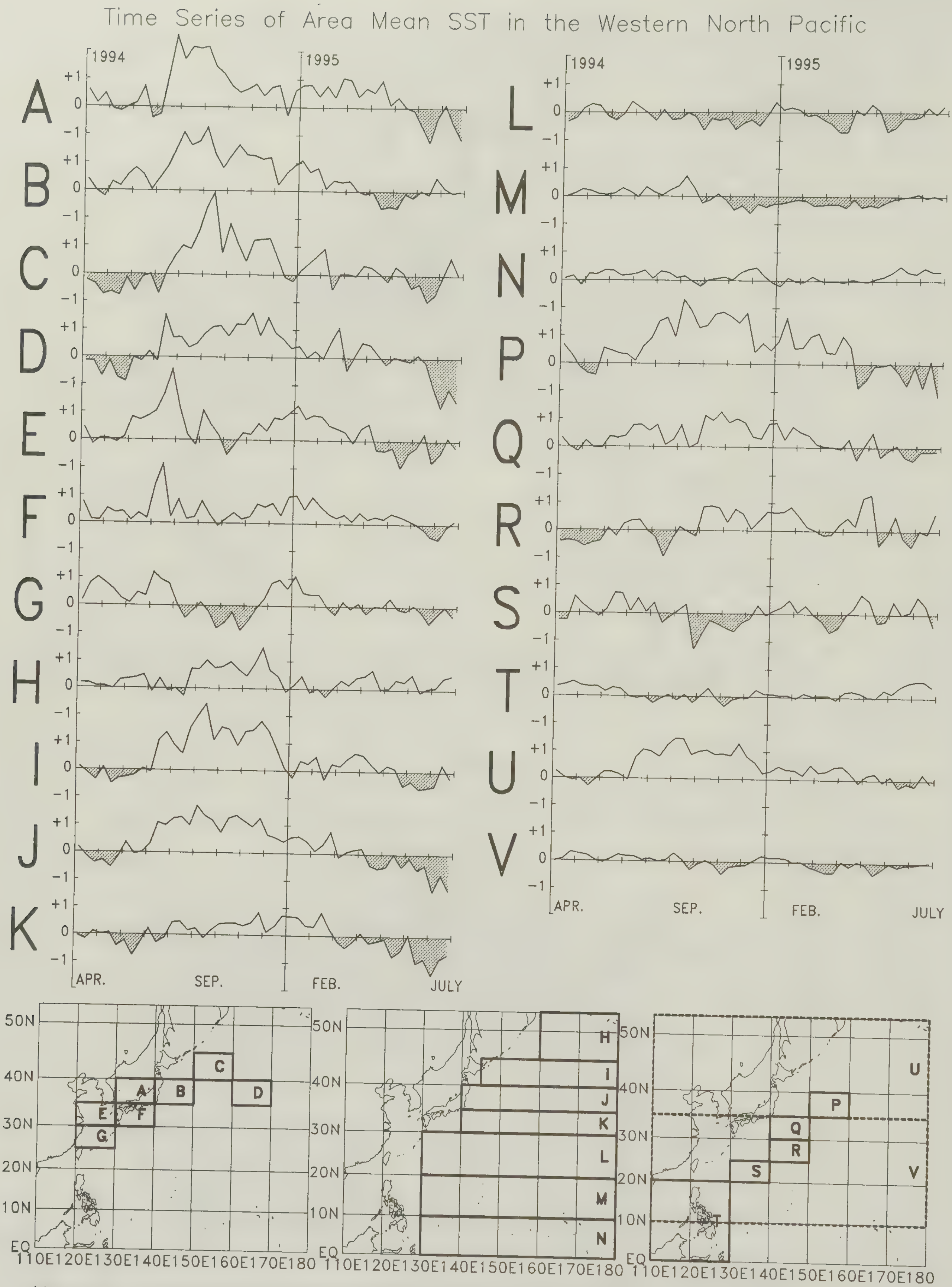
第23図 北西太平洋旬平均海面水温図(上)及び偏差図(下)(1995年 7月下旬)

Fig.23 Ten-day mean SSTs in the western North Pacific (top) and anomalies (bottom) for the 3rd ten-day period in JUL 1995. Anomalies are computed from the JMA climatology (1961−90). Contour interval is 1°C and additional anomaly contours of 0.5°C are shown as broken lines. Negative anomalies are spotted.



第24図 北西太平洋月平均海面水温図(上)及び偏差図(下)(1995年 7月)

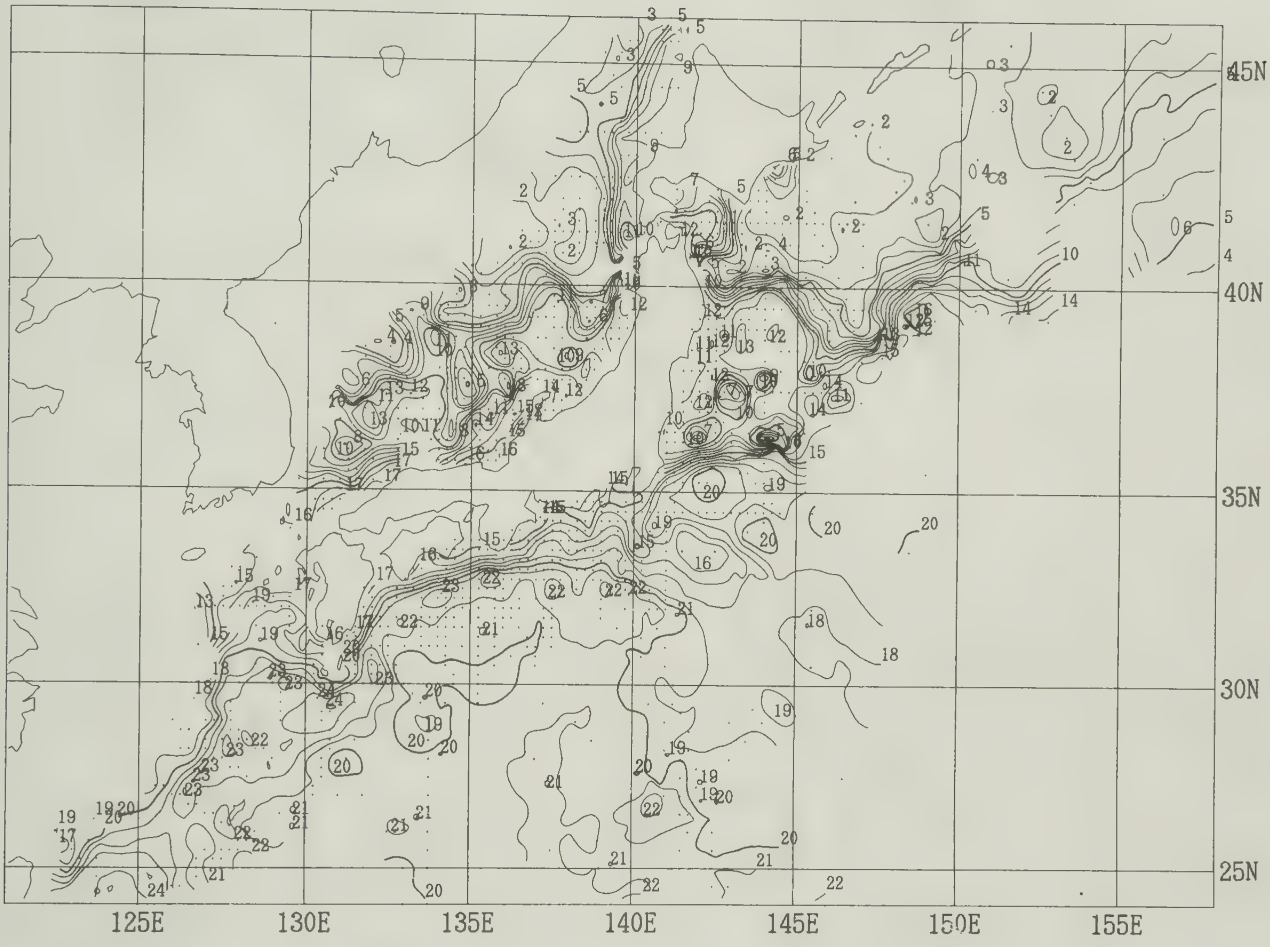
Fig.24 Monthly mean SSTs in the western North Pacific (top) and anomalies (bottom) for JUL 1995. Anomalies are computed from the JMA climatology (1961-1990). Contour interval is 1° C and additional anomaly contours of 0.5° C are shown as broken lines. Negative anomalies are spotted.



第25図　北西太平洋旬平均海面水温平年偏差時系列図

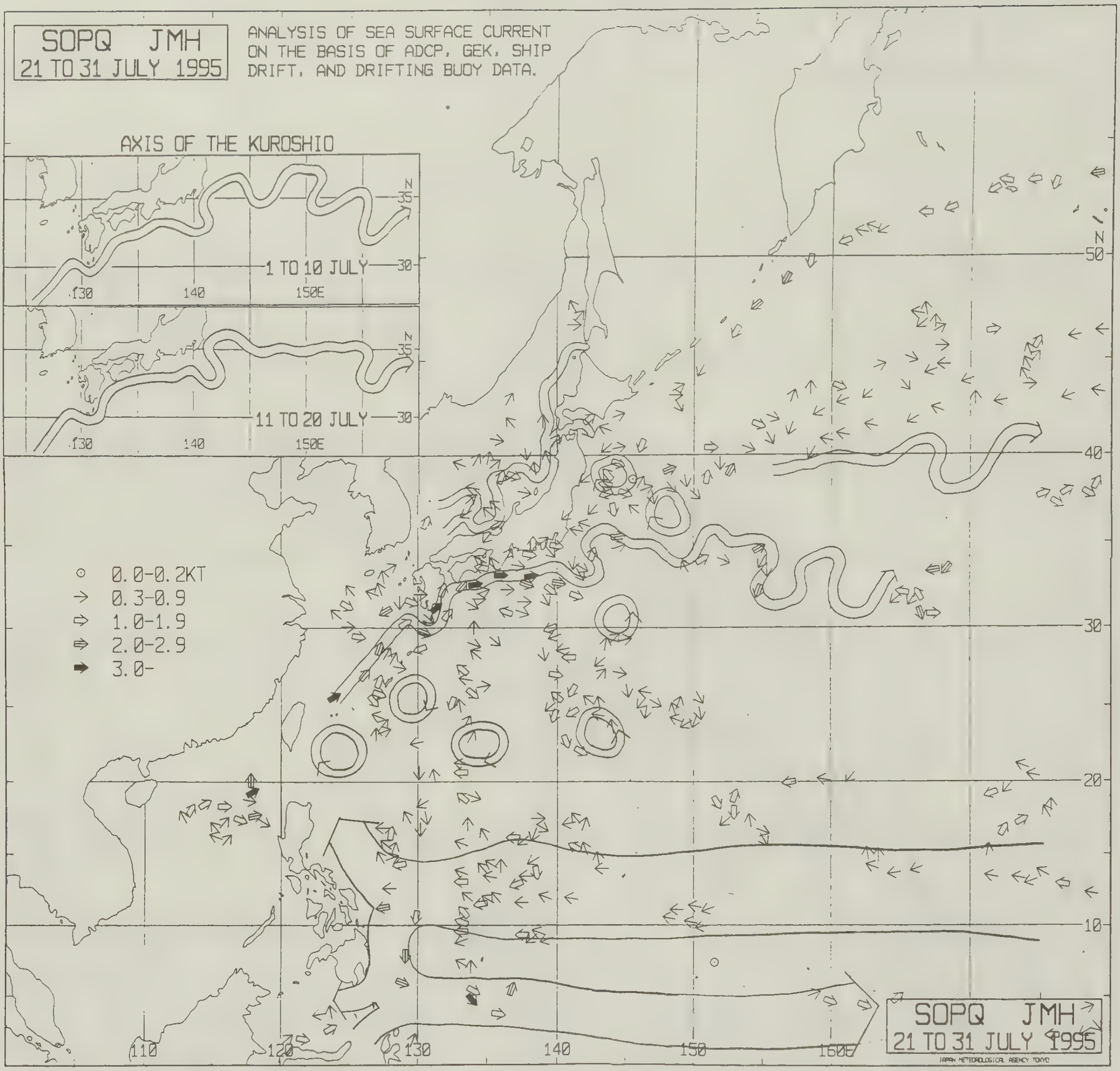
Fig.25 Time series of the ten-day mean sea surface temperature anomalies (° C) in the western North Pacific for the areas indicated at the bottom. Negative anomalies are shaded. Anomalies are computed from the JMA climatology (1961–90).

100m Temperatures in Seas Adjacent to Japan



第26図　日本近海表層水温(深さ100m)図 (1995年 7月)

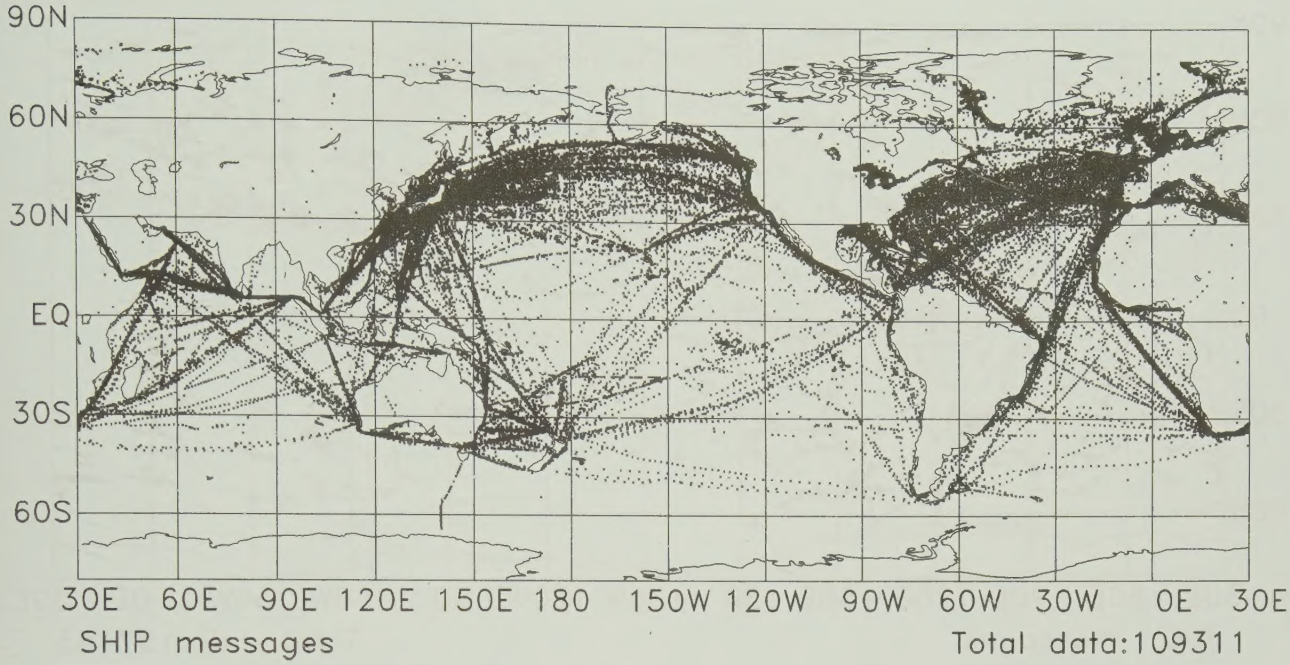
Fig.26 Subsurface (100m) temperatures in seas adjacent to Japan for JUL 1995. Contour interval is 1° C. Observation points are denoted by dots.

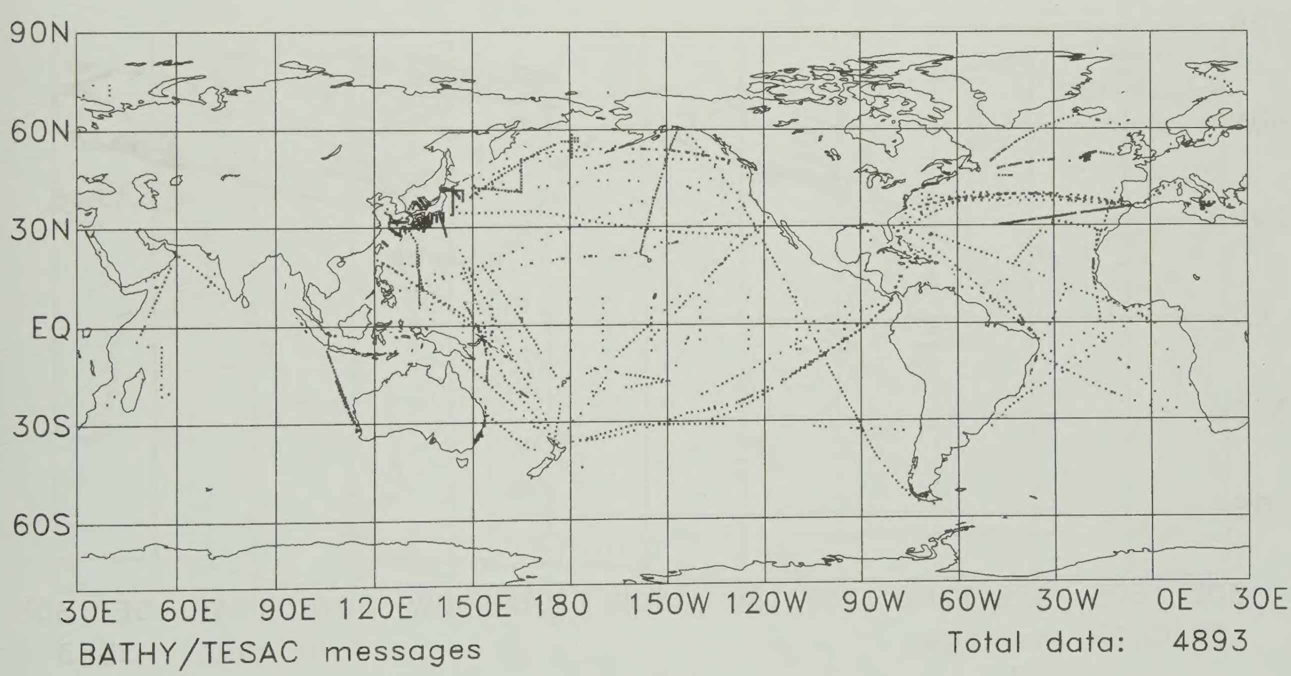


第27図　北西太平洋海流図（1995年 7月下旬）

Fig.27 Analysis of the sea surface current in the western North Pacific for the 3rd ten-day period in JUL 1995. Small arrows indicate sea surface currents measured with acoustic Doppler current profilers, GEKs deployed in research vessels, and ship drift by merchant ships/drifting buoys during the month. Major currents such as the Kuroshio and the North Equatorial Current are denoted by larger open arrows.

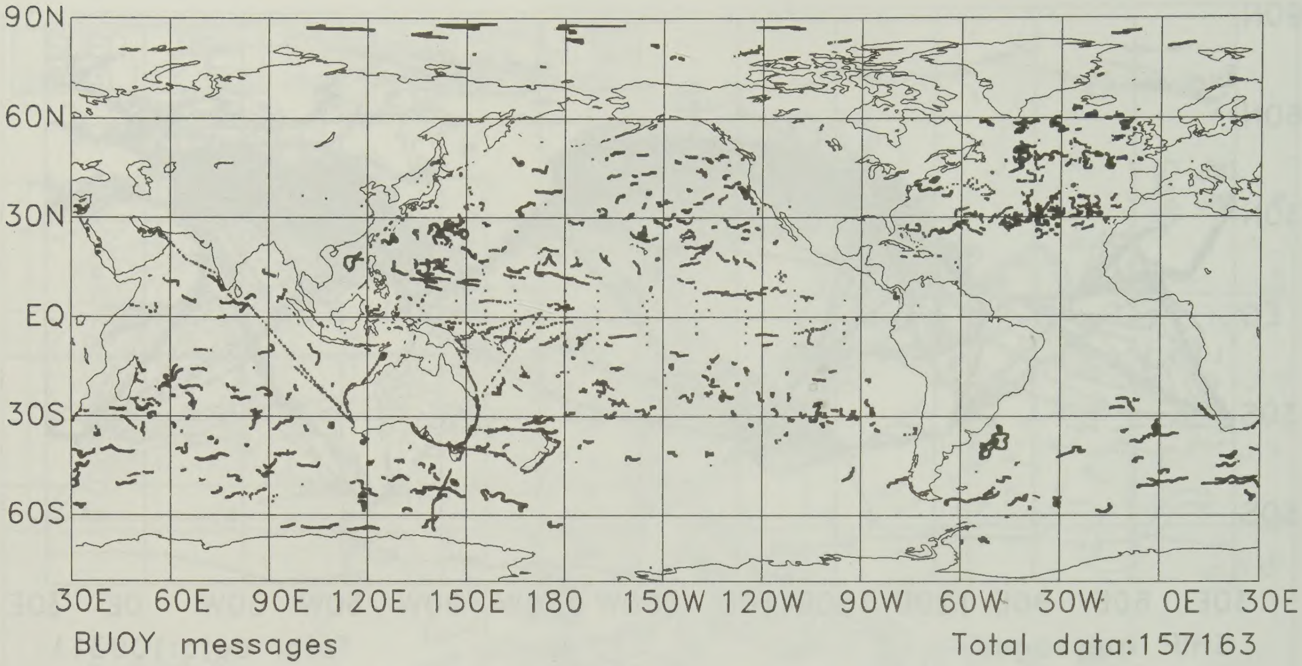
Geographical Distribution of Oceanographic Data

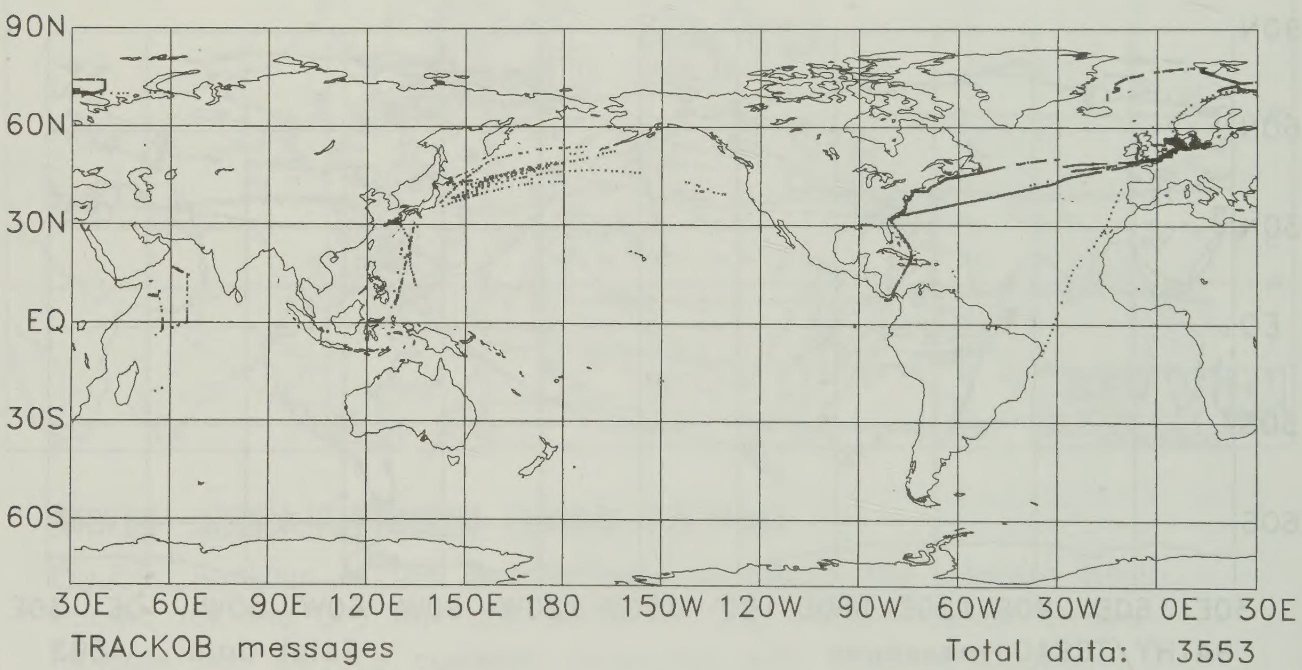




第28-1図　測点分布図(1995年 7月)

Fig.28−1 Geographical distribution of SHIP messages (SST data, top) and BATHY/TESAC messages (subsurface temperature data, bottom) for JUL 1995.





第28-2図　測点分布図(1995年 7月)

Fig.28-2 Geographical distribution of BUOY messages (buoy drift and SST data, top) and TRACKOB messages (ship drift and SST data, bottom) for JUL 1995.

気象庁海洋月報

Monthly Ocean Report

July 1995 (No. 31)

平成７年８月２０日発行

編集兼発行所　気　象　庁
東京都千代田区大手町１-３-４

印刷所　モリモト印刷株式会社
東京都新宿区東五軒町３-19